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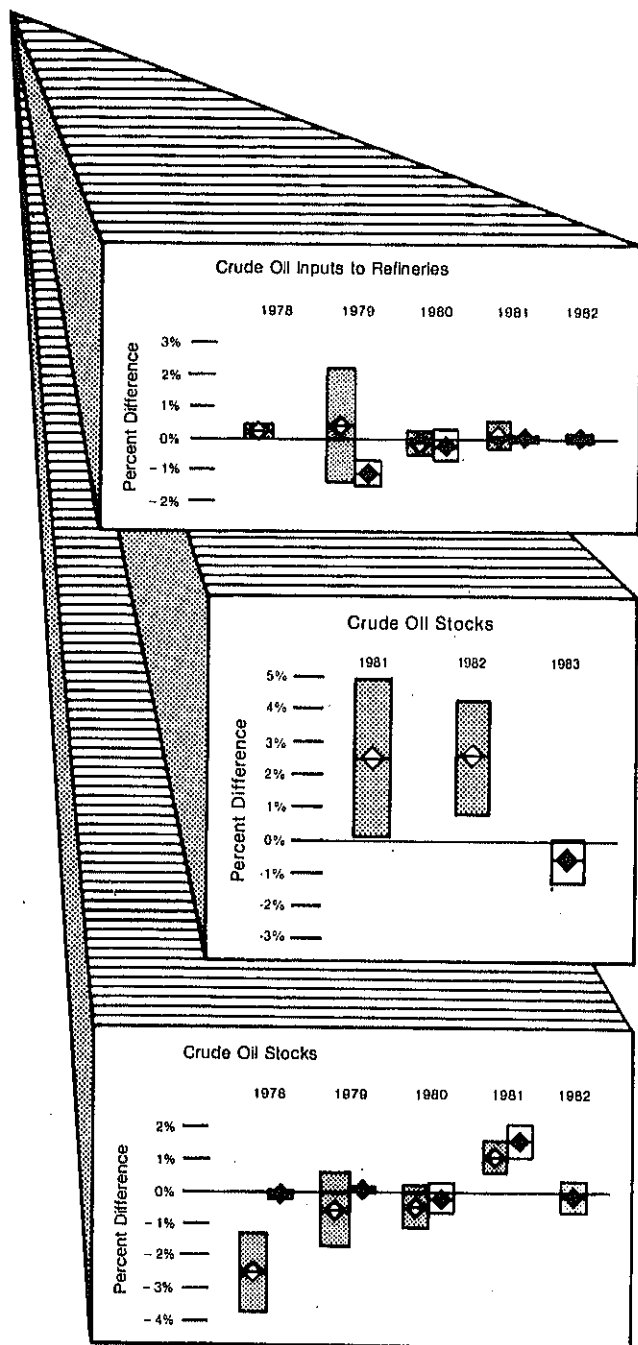
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This Month in the PSM

This Issue of the *Petroleum Supply Monthly* features a review of "Timeliness and Accuracy of Selected Petroleum Data Series," beginning on page ix. The article updates an assessment of data accuracy that appeared in the April 1982 PSM and includes, for the first time, a discussion of weekly data accuracy.



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Petroleum Focus



Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	July			Cumulative January Through July		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	14.8	14.8	- 0.3	14.9	15.5	- 3.9
Motor Gasoline	6.8	6.8	- 0.1	6.5	6.5	- 0.2
Distillate Fuel Oil	2.3	2.1	10.6	2.6	2.8	- 5.6
Residual Fuel Oil	1.3	1.6	- 19.3	1.4	1.8	- 23.1
Crude Inputs to Refineries	12.5	12.4	0.7	11.5	11.8	- 2.0
Crude Oil and Natural Gas Liquids Production	10.2	10.2	- 0.1	10.2	10.2	0.3
Net Imports ¹	5.0	5.1	- 3.3	3.7	4.2	- 12.0
Net Crude Oil Imports ²	3.6	3.9	- 7.4	2.7	3.0	- 11.6
SPR Imports	0.3	0.1	199.0	0.2	0.2	43.4
Net Product Imports	1.1	1.1	- 6.6	0.9	1.0	- 13.8
Crude Oil Stock Withdrawal ²	.28	- 0.05	—	0.02	0.08	—
Product Stock Withdrawal	- 1.01	- 0.93	—	0.30	0.52	—
Stocks at End of Period (Million Barrels)						
Crude Oil ³	347	346	NM			
Motor Gasoline ³	228	226	NM			
Distillate Fuel Oil	130	148	NM			
Residual Fuel Oil	48	59	NM			
Total Product	743	781	NM			
SPR	341	267	27.5			
Total	1,431	1,393	NM			

¹Gross imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

²Excluding SPR.

³Including blending components.

NM = Not meaningful due to new stock basis.

Note: Percent changes are based on unrounded values. July 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are June 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, August 1983.

Timeliness and Accuracy of Selected Petroleum Supply Data Series

The Energy Information Administration (EIA) collects and publishes statistics regarding the supply and movement of crude oil and petroleum products in the United States. EIA's Petroleum Supply Reporting System (PSRS) measures supply and throughput at various points in the petroleum supply flow, from the production of crude oil to the distribution of petroleum products. The relationship of the PSRS survey forms to the petroleum industry is summarized in Figure 1. The PSRS comprises the most complete, detailed collection of petroleum supply data available, and includes some information which has been collected and published by the Government since 1918.¹ Currently, EIA publishes data from the PSRS in the *Weekly Petroleum Status Report* (WPSR), the *Petroleum Supply Monthly* (PSM), the *Petroleum Supply Annual* (PSA), the *Monthly Energy Review* (MER), and the *Annual Energy Review*

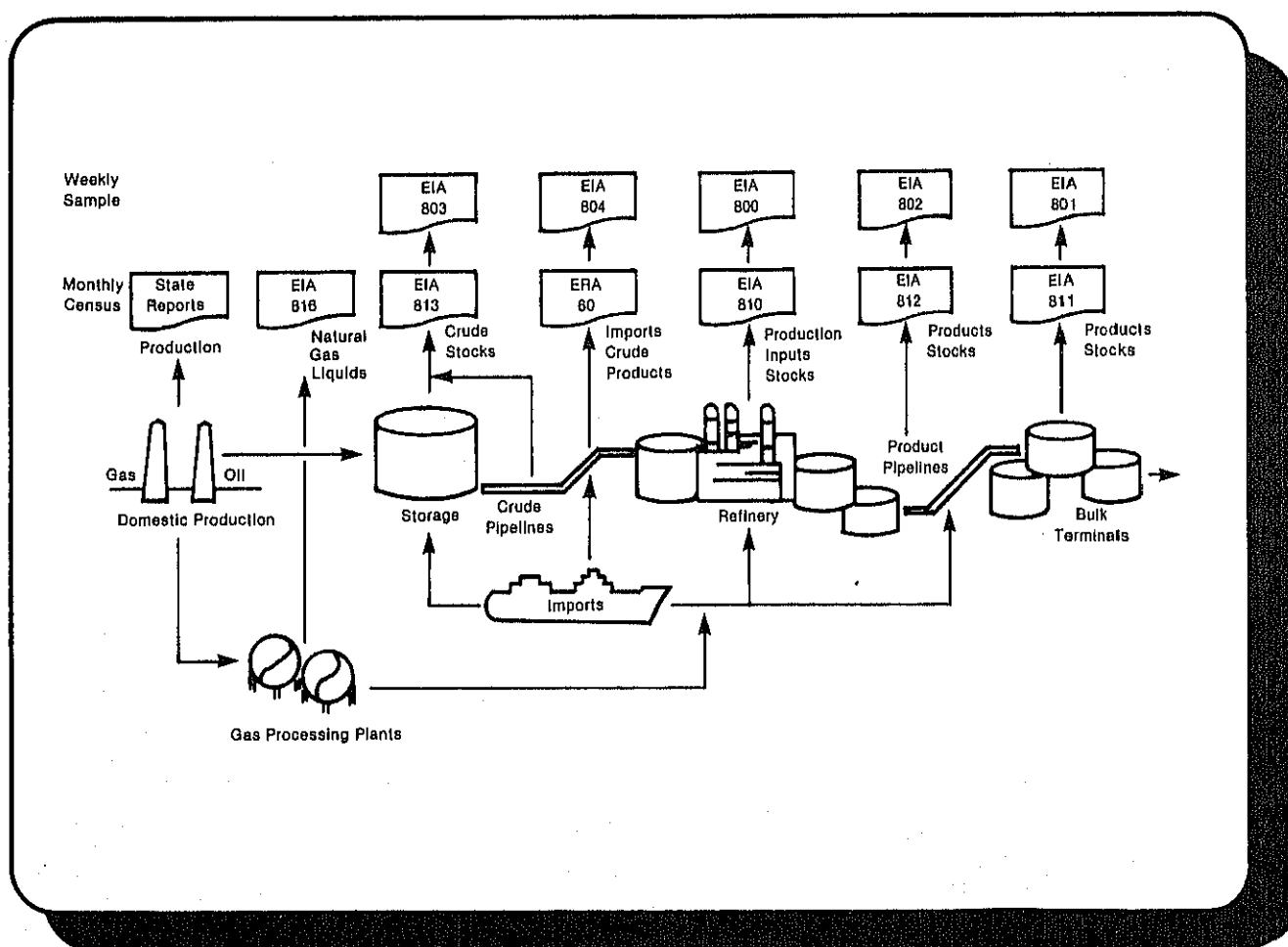
(AER). This article discusses the accuracy of EIA's petroleum supply data, updating the assessment that appeared in the April 1982 PSM and presenting new material on the accuracy of weekly data.

Petroleum Supply Data

Petroleum supply incorporates domestic production, foreign trade, refinery operations, stocks, and transportation. To simplify and to improve consistency in its petroleum supply data, EIA recently integrated its annual, monthly, and weekly petroleum supply surveys into the PSRS, which conforms to the petroleum supply network (see Figure 1).

¹See Explanatory Notes in this publication for detailed information on the data collections included in the Petroleum Supply Reporting System and their relation to individual segments of the petroleum industry.

Figure 1. Principal Petroleum Supply Data Systems



Source: Energy Information Administration

EIA's crude oil production data are based on information collected by State agencies and the U.S. Geological Survey. Preliminary estimates are supplied by EIA's Dallas Field Office, while final monthly values are supplied by State agencies.² The remainder of the data sources shown on Figure 1 are EIA surveys. EIA's weekly surveys collect data on refinery inputs; inventories and imports of crude oil; and production, inventories, and imports of major petroleum products. These data are published 6 days after the close of the report week in the WPSR. EIA's monthly survey forms collect more extensive data based on company accounting records. These data are published in preliminary form in the PSM, 60 days after the close of the report month. Final data, reflecting any necessary corrections, are published in the PSA, 6 months after the close of the calendar year. Based on this publication schedule, it is possible to assess the accuracy of the data as a function of the time following the report month.³

During the past 18 months EIA has made changes to its survey forms and definitions, survey processing systems, and timing and format of publications. Final monthly data for 1982 were published in June 1983, in the PSA, thereby allowing an evaluation of the impact of survey system changes on the accuracy of monthly petroleum supply data. In addition, the preliminary data for the early months in 1983 have been published in the PSM, thereby allowing a preliminary evaluation of the impact of the major changes which were made in the weekly system beginning in January 1983.

Factors Affecting Accuracy

For any survey, the accuracy of published data depends on two components: survey design and data quality. Survey design has three elements: the frame, the survey forms (including definitions) and the sample. Each element has its own inherent potential for error. Data quality can be defined as the extent of the agreement between the data that are published, and the data that *would* be published, if all scheduled respondents reported on time, with no errors, and if no errors were made in entering and processing company submissions. Data quality also has three potential sources for error: non-response, errors in submitted data, and errors in data entry. All six of these error sources are described below.

Survey Frame

The frame for a survey is a list of all companies identified as members of the industry to be surveyed. If the frame is incomplete, i.e., if some companies which are members of the industry are not on this list, the result is an undercounting of the items being measured. The frames for EIA's weekly and monthly surveys consist of all:

- Refiners and mechanical blenders of motor gasoline

- Bulk terminals with capacity of 50,000 barrels or more, or which receive product by tanker, barge or pipeline
- Petroleum product pipelines
- Storers of crude oil of 1,000 barrel or more
- Licensed importers or importers of record
- Companies that ship petroleum products from Puerto Rico to the United States
- Operators of natural gas plants and fractionators.

The frames are continually reviewed and updated to minimize undercounting; however, births and deaths among firms in the petroleum industry are difficult to track in a timely manner. For this reason, EIA survey frames periodically receive a detailed analysis and review to assure completeness. A recent review indicated that the refinery frame was complete, but frames for the bulk terminals, pipelines and crude oil stockholders needed to be augmented. As a result, data from newly identified firms were included in EIA data series beginning in January 1983. Augmenting the frame increased total inventories reported by approximately 2.3 percent.⁴

At present, the only known frame problem concerns import surveys. The Imports licensing system, currently operated by the Energy Regulatory Administration to track imports of most petroleum products, is the source for EIA's Imports frame. For products which require import licenses, the frame is complete. However, firms that import only unlicensed products, e.g., liquefied petroleum gases and asphalt, are not required to have licenses and may not be in EIA's frame. Therefore, EIA relies on Census Bureau data for imports of unlicensed petroleum products.

Survey Forms and Definitions

Data describing industry operations are obtained from survey respondents who submit completed survey forms. Errors can result if requested data do not adequately describe some aspect of the industry. For example, the refinery survey was revised in January 1981 to obtain greater detail on inputs of petroleum products in order to correct undercounting of products that were reprocessed within refineries. Other errors can result if

²See Explanatory Note 3 in this publication for a detailed discussion of domestic crude oil production data and estimation procedures.

³Each year the Energy Information Administration assesses the accuracy of its data series. See *An Assessment of the Quality of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292(82), April 1983, for the assessment of 1982 data series. Assessments relating to petroleum supply data collections from 1977 through 1981 were discussed in the *Petroleum Supply Monthly*, DOE/EIA-0109 (82/04), April 1982.

⁴See article entitled "Petroleum Supply Reporting Systems Overview," *Petroleum Supply Monthly*, March 1983, for details concerning that analysis and resultant changes to published data.

the definitions are ambiguous, leading to varying interpretations by respondents. The PSRS survey forms were revised to improve consistency and a single set of definitions was created for all surveys effective January 1983. This revision greatly improved the comparability of monthly and weekly data.

Sampling Error

The sample is a list of those companies in the frame which were selected to be surveyed. Some error, called sampling error, is always expected in providing estimates for firms not included in the sample. Sampling error is not germane to EIA monthly surveys, because all companies in the frames are surveyed. Weekly surveys, however, are all based on samples, and sampling error does occur. This accounts for part of the difference between published weekly totals and final annual data.

EIA's weekly samples are cut-off samples. In a one-product cut-off sample, companies are ranked in descending order based on the volumes reported for that product on the monthly surveys during the previous year. Companies reporting the largest volumes are selected until the aggregated product volume of sampled companies amounts to 90 percent of the total. Because weekly surveys cover more than one product and reporting companies are located in different geographic regions, a variation of the cut-off sampling procedure was developed to assure at least 90 percent coverage of each product in each region, while surveying a minimum number of companies.

Nonresponse

Occasionally, survey responses are not received in time to be included in published statistics. Imputation, a method of estimating the quantity associated with non-respondents, is used to reduce this type of error. Imputation does not eliminate error, however, because the imputed value is only an estimate for missing data.

The PSRS monthly surveys, except for imports, use the data reported in the previous month as the imputed value in the present month. Because the monthly surveys have excellent response rates, generally over 99 percent, little imputation is necessary.

There is no imputation for nonresponse to the monthly import surveys at the present time. This is the principal reason for the systematic underreporting of preliminary monthly imports data.⁶

A new weekly processing system was implemented in January 1983. It includes imputation for nonresponse based on the history of a company's previous responses. The procedure is used for all weekly surveys, including imports. For products the company usually does not report, a zero value is used. For those prod-

ucts the firm does report, an exponentially smoothed average of its past responses is used. This procedure proved to be quite accurate and justified moving the publication of the WPSR forward by 1 day in July 1983.

Data Submissions

Occasionally there are mistakes in data submitted by respondents. Sometimes companies submit their forms before their records are finalized. This is the case with the weekly forms, on which companies provide their best estimates. Sometimes this is also true of monthly data. This is a major source of revisions to EIA published monthly statistics. Errors resulting from misunderstanding of the forms or the instructions are addressed in the discussion of survey forms and definitions on page x. Errors by respondents in figures submitted on survey forms can often be detected and resolved by editing procedures, as discussed in the following section.

Data Entry

Data entry into computer files presents another opportunity for error. Depending on their magnitude, some of these errors can be identified and corrected by automated edit procedures that check current data for consistency with past data and for internal consistency, e.g., totals equal to the sums of the parts. Both EIA's monthly and weekly survey systems have editing capabilities. The weekly system relies more strongly on automated edits to identify errors because of the short time between data entry and publication. The monthly system has automated edits, but relies strongly on manual reviews to identify errors. Automated edits based on historical data are under development for the monthly surveys.

Survey and Publication Timing

The weekly reporting period runs from 7 a.m. on Friday to 7 a.m. on the following Friday. Companies are required to submit data for a report week to EIA by 5:00 p.m. on the Monday following the close of the report week.

On July 14, 1983, EIA began to publish weekly data in the WPSR on the Thursday following the report week. Prior to that time, the WPSR was published on the Friday following the report week. This change requires completion of final data estimates one day earlier. Firms were encouraged to respond earlier. Because of

⁶Problems associated with imputation for nonresponse in the imports surveys are discussed in the "Imports" section of this article beginning on page xiii.

their cooperation and improved procedures for nonresponse imputation, it was possible to move the publication date forward without a significant change in accuracy.

For a calendar report month, companies are required to submit responses within 20 days following the report period. Because these submissions are to be based on company records, revisions are required if errors of more than 5 percent from the original submissions are found.

In March 1982, the PSM consolidated data that were previously published in four EIA monthly petroleum publications, including the *Monthly Petroleum Statistics Report* (MPSR) and the *Monthly Petroleum Statement* (MPS). The PSM now publishes those data 60 days after the end of a report month. Prior to the PSM consolidation, data appeared in the MPSR 60 days after the end of a report month and in the MPS 90 days after the end of the report month. This provided "snapshots" of the same data base at different points in time. The MPS time schedule allowed revisions to reflect company resubmissions and corrections, inclusion of data from companies that were nonrespondents at the last publication, and correction of data processing errors. While the time lag for publication of monthly data in the PSM is virtually the same as in the MPSR, the PSM presents the more comprehensive statistics previously provided in the MPS.

Final monthly data are now published in the *Petroleum Supply Annual* (PSA) 6 months after the close of the calendar year. Prior to the March 1982 consolidation, final data were published in the *Annual Petroleum Statement* (APS) 9 months after the close of the calendar year.

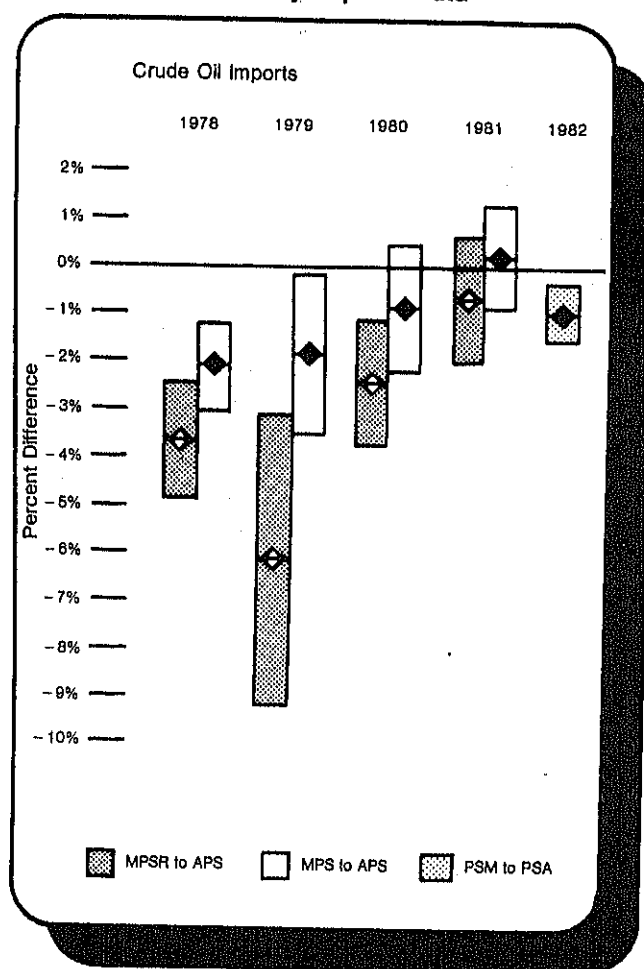
Data Accuracy as a Function of Time

It has been shown that data accuracy improves with the length of time since the report period.^a This raises questions concerning the quality of EIA's monthly data, because there is now only one publication and it is published early. Using final 1982 data published in the PSA, EIA's Petroleum Supply Division evaluated the accuracy of the 1982 data previously published in the PSM, and compared it with the observed accuracy in the MPSR and the MPS for 1978 through 1981.

Revisions from preliminary to final monthly data as a percent of the final value in EIA's annual petroleum supply publications are illustrated in Figures 2, 3, and 4 by bars based on the mean and the standard deviation of percent differences between preliminary and final monthly data.

The percent difference for a month is the difference between the preliminary value and the final value multiplied by 100 and divided by the final value. The mean is the average of the percent differences for the year. A diamond locates the mean on each bar. The standard deviation is the square root of the sum of the squared percent differences for the year divided by 11. The end points of the bars are equal to the mean plus and minus one standard deviation.

Figure 2. Comparison of Preliminary and Final Monthly Imports Data



Note: Diamond = Mean
Bar = Mean \pm One Standard Deviation

Source: Energy Information Administration

^aSee Energy Information Administration, *Assessment of the Accuracy of Principal Data Series of the EIA*, DOE/EIA 0292, June 1981, for a detailed discussion.

Prior to 1982 the darker bar in each pair represents a comparison of preliminary values from the MPSR and final values from the APS. The lighter bar represents preliminary values from the MPS and final values from the APS. For 1982, the single light dotted bar represents a comparison of preliminary values from the PSM and final values from the PSA. The fact that the light bars are generally smaller and centered about zero illustrate that accuracy improved as data were received from nonrespondents to the MPSR, resubmissions, and data corrections were incorporated into data published 30 days later in the MPS.

The bars illustrate bias in the preliminary data in the event that they are centered well above or below the 0-percent line. Bias indicates a systematic difference between preliminary and final data series, i.e., one series is consistently higher or lower than the other. Causes of systematic differences can usually be identified. The length of a bar illustrates the variability of the difference between the two series. If the ends of the bar were at plus and minus 1 percent, for most months absolute values of the difference between the two series was less than 1 percent.

Monthly Data Assessment

Highlights of preliminary and final monthly data comparisons are presented below. Figure 2 illustrates changes in accuracy for crude oil imports data over a 5-year period from 1978 through 1982. Figure 3 summarizes changes in the accuracy of data on crude oil inputs to refineries, production of motor gasoline, production of distillate fuel oil and production of residual fuel oil for the same years. Figure 4 summarizes the changes in data accuracy for stocks of crude oil, motor gasoline, distillate fuel oil, and residual fuel oil.

Imports

Figure 2 shows that preliminary estimates in the crude oil import series tend to be low. Most of the bars are centered around negative values. The length of the bars also shows a great deal of variability in the revisions, i.e., from month to month the revisions will fluctuate from being well above the mean to well below the mean.

The preliminary estimates are low because there is no effective imputation procedure for monthly imports. The amount imported by smaller companies, the most frequent nonrespondents, in any given month is likely to be zero. Thus, if a smaller company fails to submit a monthly report on time, the best estimate for the quantity it imported is zero. For this reason, nonrespondents are assumed to have no imports, even though the aggregate of all nonrespondents might contribute a quantity greater than zero. Lack of an imputation procedure contributes to the understatement of imports by preliminary data.

The revisions to imports data are large because final company imports records are not available until forms have been returned by the U.S. Customs Service (USCS).

PSM data for 1982 crude oil imports showed a significant improvement over the MPSR data published previously at the same time interval, as well as improvement over the MPS data for most years. The 1982 preliminary data have a bias of about -1 percent, but the magnitude of revisions are smaller. The improvement can be attributed to the use of USCS data available through the Petroleum License Decrementing System (PLDS) to identify major importers and validate their data. Despite differences in product definition and date of importation between EIA surveys and USCS forms, the availability and use of customs data has helped EIA to improve the quality and timeliness of imports data.

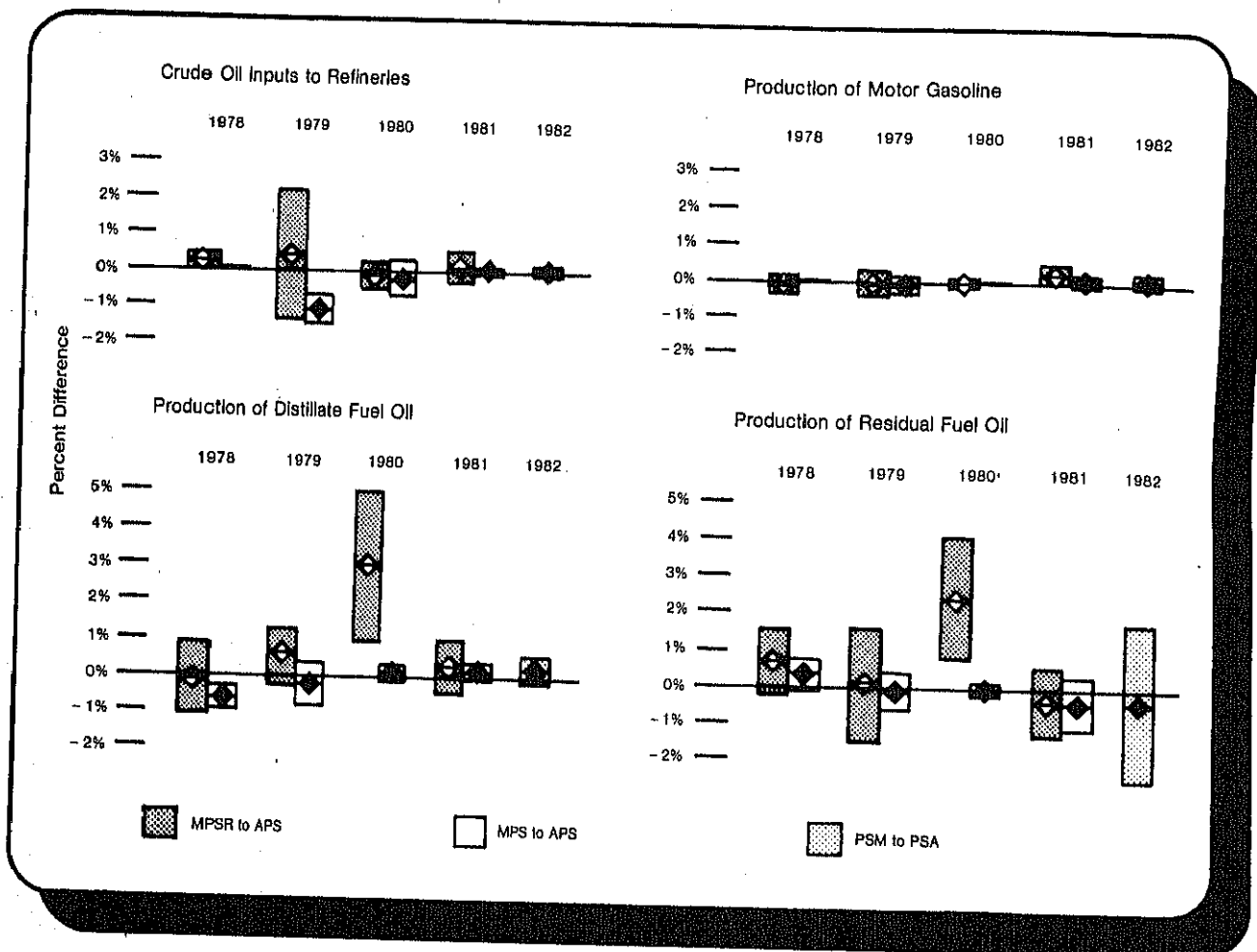
Beginning in January 1983, smaller companies were required to file an EIA imports survey form only for months in which they had import activity. This change reduced both respondent and processing burden, and has been made possible by the use of PLDS data to identify active importers, thus controlling nonresponse error.

Refinery Inputs and Production

Refinery inputs and production data are derived solely from the refinery survey form. Figure 3 summarizes the historical accuracy of preliminary data compared to final data for crude oil refinery inputs, and production of motor gasoline, distillate fuel oil and residual fuel oil.

Except for residual fuel oil, the accuracy of the 1982 PSM data was comparable to the accuracy of the MPS data in previous years. In addition, revisions from the PSM to the PSA were less than 0.4 percent in every month for crude inputs and motor gasoline production. For distillate production and residual production the largest revisions occurred in January and February 1982, the beginning of the new publication schedule. For distillate the largest error was 24 thousand barrels per day (0.92 percent) and for residual fuel oil the largest error was -52 thousand barrels per day (-4.4 percent). The bar for residual fuel oil production is large because 3 months in 1982 (January, February and August) had 4.0 percent revision errors. For the remaining months, revisions were less than 0.35 percent. The large errors for residual fuel oil were due to imputations for one company. That company filed both its January and February data in March 1982, and was also late filing its August data. Both of these time periods coincided with large changes in its residual fuel oil production patterns, increasing production by over 100 percent early in the year, and cutting production by more than 50 percent in August. No imputation procedure can anticipate such departures from historical reporting patterns.

Figure 3. Comparison of Preliminary and Final Monthly Inputs and Production Data



Note: Diamond = Mean
Bar = Mean \pm One Standard Deviation

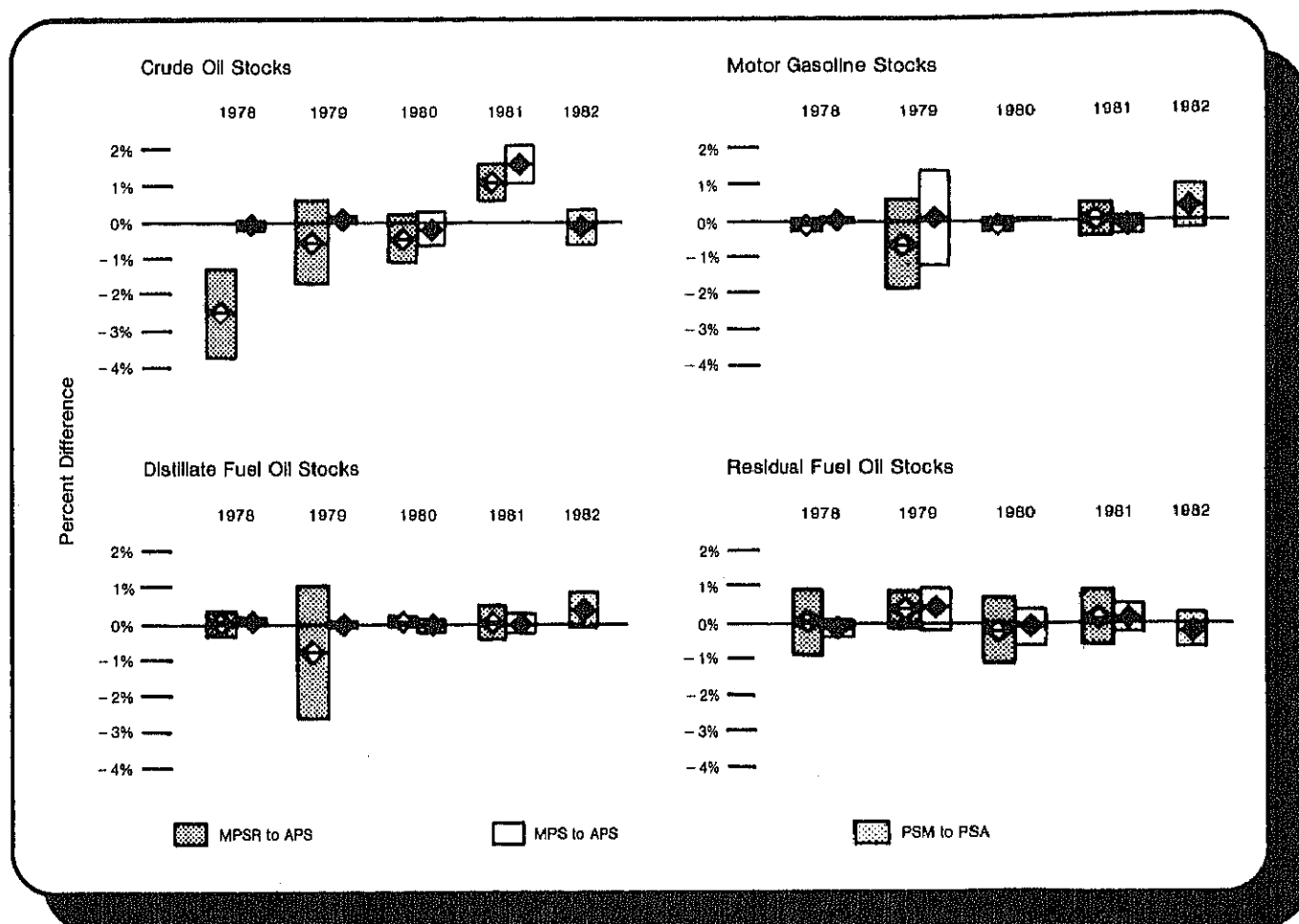
Source: Energy Information Administration

Stocks

Crude oil stocks data are derived from the refinery form and from the crude oil stockholders form. Product stocks are derived from the refinery form, the bulk terminal form, and the product pipeline form. Figure 4 illustrates comparisons of preliminary and final data for inventories of crude oil, motor gasoline, distillate fuel oil, and residual fuel oil for 1978 through 1982.

For crude oil stocks, the revision error from PSM to PSA in 1982 was consistent with the revision error from MPS to APS in previous years. While there was a relatively large revision of 1.4 percent for 1 month in 1982, the revision error in all other months was less than 0.6 percent.

Figure 4. Comparison of Preliminary and Final Monthly Stocks Data



Note: Diamond = Mean
Bar = Mean ± One Standard Deviation

Source: Energy Information Administration

Overreporting of crude oil stocks in preliminary 1981 publications was attributable to respondents' problems in interpreting changes to EIA survey forms in January 1981. Prior to that time, companies reported crude oil stocks at refineries on both the refinery form and on the crude oil stockholders form. Only the data from the

crude oil stockholders form were used for publication. In 1981, data on refinery crude oil stocks were no longer to be included on the crude oil stockholders form. Double counting occurred for a time, because several companies continued reporting refinery stocks on both forms.

For stocks of motor gasoline and distillate, the revision error from the MPS to the APS for most years has been extremely small. Except for 1979, the revision error from MPSR to APS for these products was within about 0.5 percent. In 1982 the revision from the PSM to the PSA was somewhat larger than in previous years. For motor gasoline there was a revision of 2.1 percent in February 1982, when an incorrect imputed value was entered for that month because of a clerical error. Because the revision error was less than 0.7 percent in the remaining months, omitting that 1 month from the statistics would bring the bar more in line with the accuracy levels of previous MPSR data.

For distillate fuel oil, the PSM to PSA bar for 1982 is comparable with most MPSR to APS bars. In 1982, most of the revisions were made to the data for the first 6 months of the year. In the last 6 months, revisions were all less than 0.15 percent.

For residual fuel oil stocks, the 1982 PSM to PSA accuracy is in line with that of previous years. Much of the difference in 1982 was due to an error of 1.4 percent in March, attributable to mistakes in data entry. For other months the revision error was 0.7 percent or less.

Weekly Data

Figures 5, 6, and 7 illustrate comparisons between weekly and monthly published data. These charts illustrate the same slates of products as Figures 2, 3, and 4.

Weekly data were compared to PSA final data for 1981 and 1982. To provide an early indication of the impact of systems changes on WPSR accuracy, the weekly data were also compared to PSM preliminary data for 4 months of 1983.

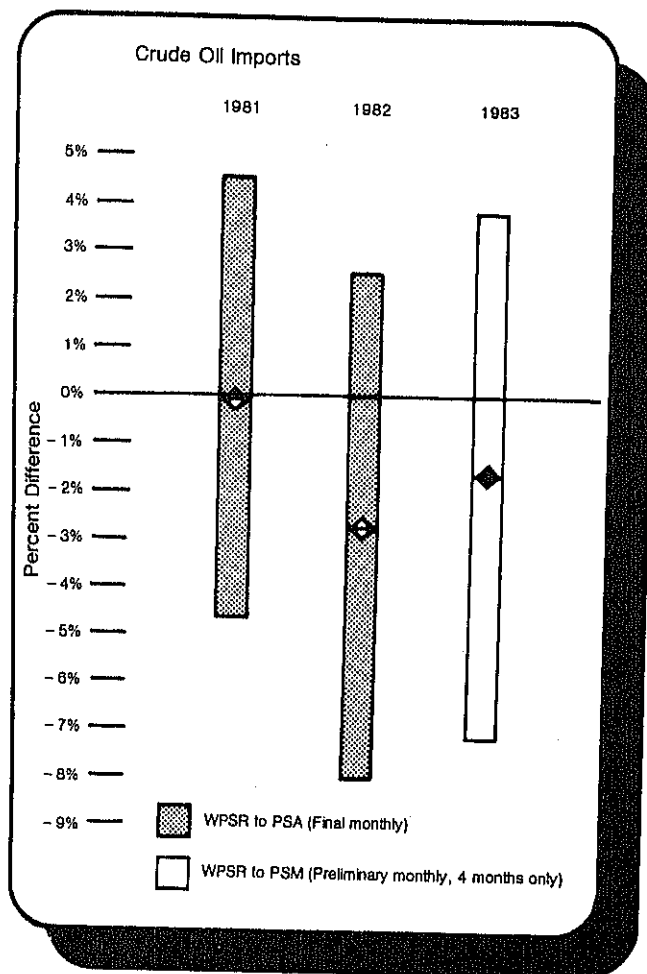
During 1982, a major effort was undertaken to improve the quality of the weekly data. These data, based on estimates provided by a sample of the companies, were intended to serve primarily as a leading indicator of the monthly data and were never expected to have the same level of accuracy. The primary focus of the improvement effort was to eliminate the systematic biases illustrated in Figures 5, 6, and 7.

Several interim changes were made in estimation programs in May 1982. More sophisticated edit and imputation procedures were included in the weekly processing system in January 1983. Survey forms were redesigned to improve comparability with the monthly forms. Also, individual companies are being contacted, when their weekly data show systematic differences from their monthly data. These differences are generally due to misunderstandings of instructions or definitions, or problems in classifying some products at different points in time. For example, residual fuel oil might be classified as an unfinished oil or as residual

fuel oil depending on whether it is to be further processed or sold. Ambiguities of this type are inherent in industry operations, and will be especially apparent in comparing monthly and weekly data. Systematic errors attributable to estimation and imputation have been resolved.

The accuracy of the WPSR's crude oil imports series remained about the same in 1981, 1982, and through the first 4 months of 1983 (see Figure 5). The new weekly system imputes for nonresponse in the imports system as well as for the other surveys. Imputation for imports is more successful for the weekly system than for the monthly because only the larger companies are in the weekly sample.

Figure 5. Comparison of Weekly and Monthly Imports Data



Note: Diamond = Mean
Bar = Mean ± One Standard Deviation

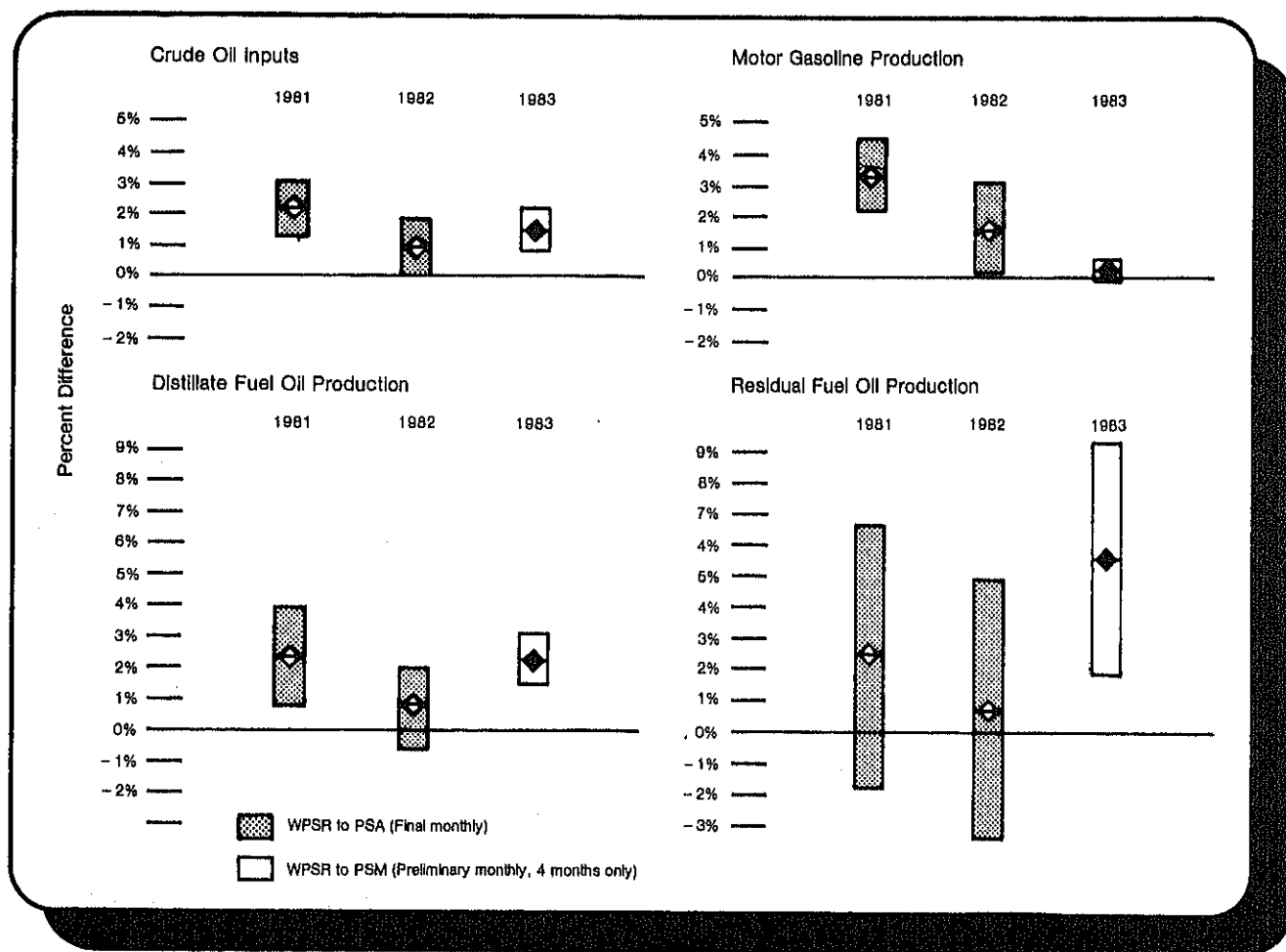
Source: Energy Information Administration

There has been considerable improvement in WPSR accuracy for production of motor gasoline (see Figure 6). Crude oil inputs, and distillate fuel oil and residual fuel oil production still show positive biases directly related to reporting differences of a few companies. As these companies reduce their reporting differences, the WPSR data should become less biased.

The WPSR stocks data comparisons are illustrated in Figure 7. Motor gasoline stocks appear high because of one large error (2.35 percent) attributable to differences in reporting the large drawdown in bulk terminal stocks

In anticipation of the Federal tax increase that became effective on April 1, 1983. The monthly data, effective midnight on March 31, 1983, showed this drop in stocks. The weekly data, effective 7:00 a.m. on Friday April 1, 1983, did not. The drop in inventories became evident in the weekly data for April 8, 1983. For the first 4 months in 1983, the crude oil and distillate fuel oil stocks data are much improved over 1981 and 1982 data. The residual fuel oil stocks data are still systematically low because of misreporting at bulk terminals. EIA is contacting these respondents and working with them to resolve these discrepancies.

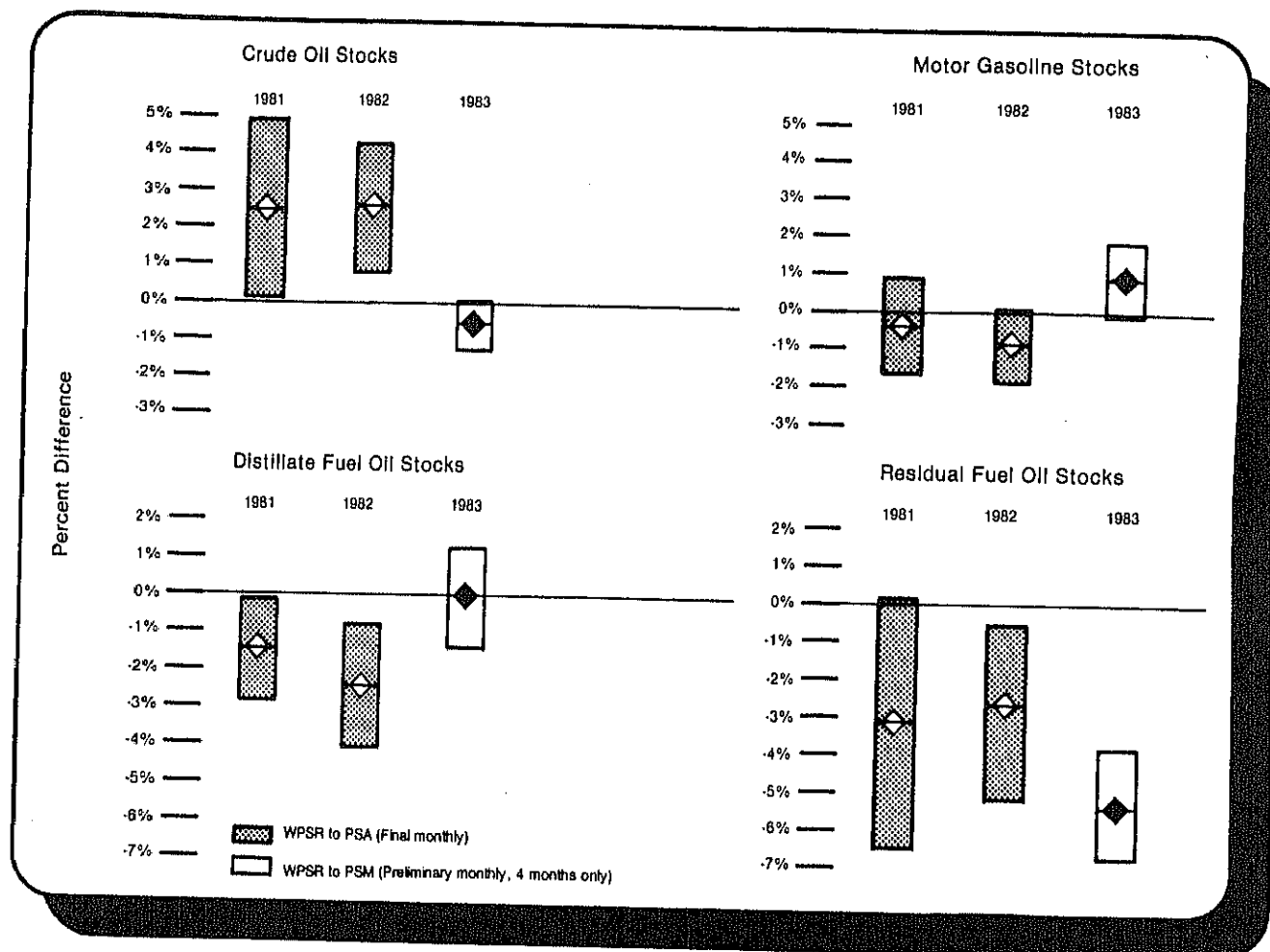
Figure 6. Comparison of Weekly and Monthly Inputs and Production Data



Note: Diamond = Mean
 Bar = Mean \pm One Standard Deviation

Source: Energy Information Administration

Figure 7. Comparison of Weekly and Monthly Stocks Data



Note: Diamond = Mean

Bar = Mean \pm One Standard Deviation

Source: Energy Information Administration

Conclusion

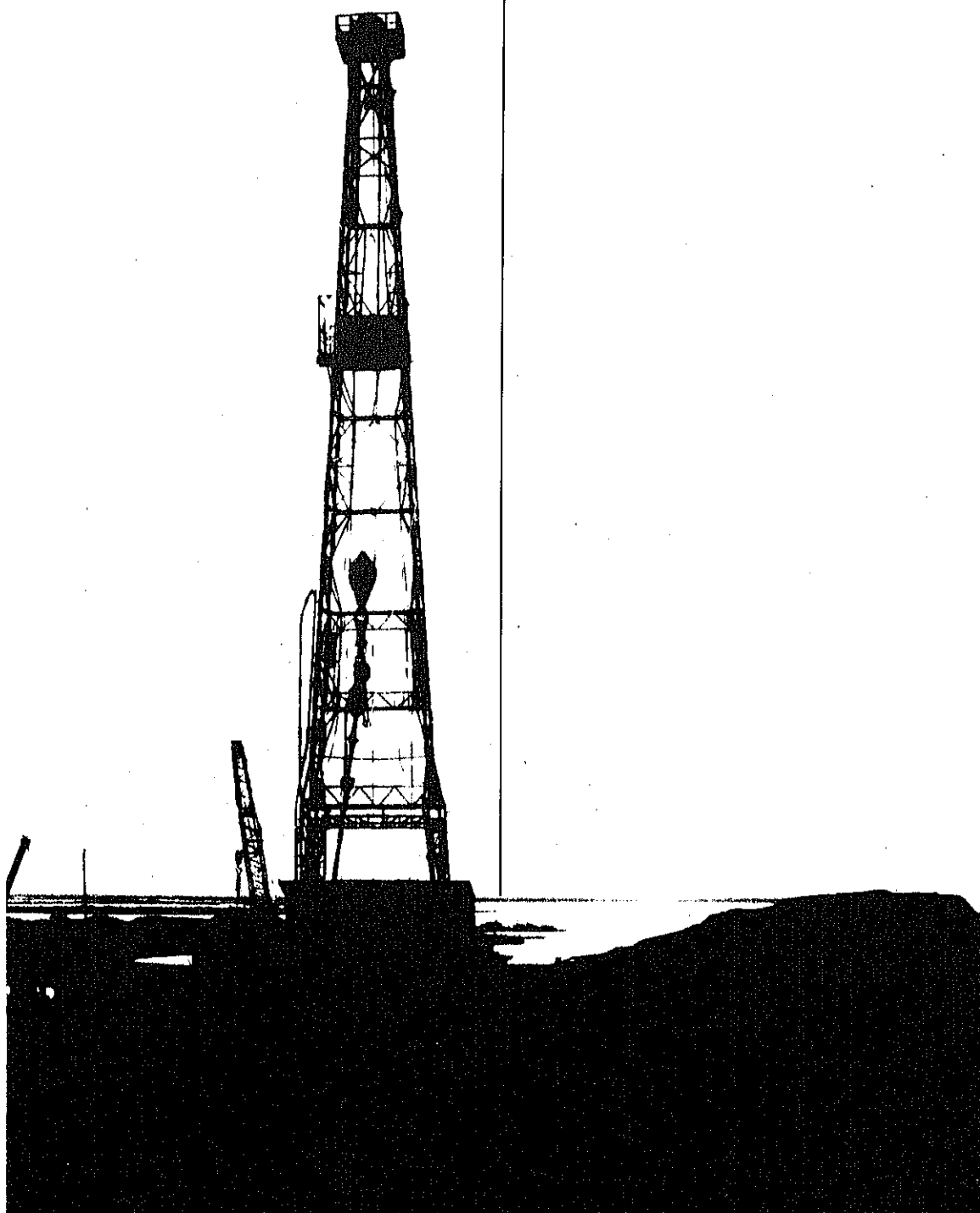
Data quality efforts have enabled EIA to advance the of its publication of monthly petroleum supply with no deterioration in the accuracy of most data. This achievement is due primarily to the efforts of personnel.

f survey respondents,

the biases in weekly petroleum supply data will continue to lessen. Overall improvement in weekly accuracy has been a joint effort involving more timely and consistent reporting by respondents, new statistical imputation procedures, new computer editing and processing systems, and the desire of the weekly processing personnel to publish highly accurate and timely petroleum supply data.

Summary Statistics

1982 Statistics Contained In This Section
Are Final. They have been extracted from
the Petroleum Supply Annual which was re-
leased June 30, 1983.



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
								Millions of Barrels
Thousand Barrels per Day								
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,853	⁶ 1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	⁶ 1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
		AVERAGE	10,230	8,572	1,609	-290	130	16,058
1982	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,667	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,393
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,359	8,697	1,609	-398	-361	15,009	1,455
	December	10,276	8,598	1,628	128	688	15,487	⁶ 1,430
		AVERAGE	10,252	8,649	1,550	-136	283	15,296
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March	10,259	8,677	1,544	56	1,765	15,484	1,375
	April	10,229	8,686	1,502	-438	431	14,779	1,376
	May	10,231	8,682	1,483	68	-759	14,250	1,397
	June*	10,262	8,676	1,514	R -163	R -242	R 15,281	R 1,409
	July**	NA	8,647	NA	6	-1008	14,781	1,431
	AVERAGE	NA	8,666	NA	-199	302	14,873	

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Stocks are totals as of end of period.

⁴ Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks located in the Strategic Petroleum Reserve.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462.

Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available, R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports				
		Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products		Net ³ Imports
Thousand Barrels per Day									
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025	
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892	
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846	
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090	
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565	
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002	
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984	
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365	
1981	January	6,827	4,932	1,895	558	339	219	6,270	
	February	6,772	4,873	1,899	569	198	371	6,203	
	March	6,028	4,521	1,507	586	210	376	5,442	
	April	5,668	4,338	1,330	570	198	372	5,098	
	May	5,775	4,287	1,489	595	312	283	5,180	
	June	5,435	4,061	1,375	420	123	297	5,015	
	July	5,816	4,296	1,521	571	257	314	5,245	
	August	5,767	4,179	1,588	644	204	440	5,123	
	September	6,365	4,740	1,624	519	194	325	5,845	
	October	5,959	4,380	1,579	738	226	512	5,221	
	November	5,741	4,046	1,695	701	278	423	5,041	
	December	5,843	4,137	1,706	656	189	467	5,187	
	AVERAGE	5,996	4,396	1,599	695	228	367	5,401	
1982	January	5,332	3,693	1,639	829	238	591	4,503	
	February	4,807	2,990	1,817	804	304	499	4,003	
	March	4,484	2,874	1,610	882	321	561	3,602	
	April	4,378	2,849	1,529	786	174	611	3,593	
	May	4,811	3,309	1,503	803	262	542	4,008	
	June	5,327	3,836	1,491	703	94	609	4,624	
	July	5,890	4,248	1,642	741	229	512	5,149	
	August	5,244	3,851	1,392	858	304	554	4,386	
	September	5,414	3,636	1,778	791	184	606	4,624	
	October	5,306	3,670	1,636	932	270	662	4,374	
	November	5,744	3,862	1,882	786	262	524	4,958	
	December	4,606	3,000	1,605	860	193	667	3,746	
	AVERAGE	5,113	3,488	1,625	815	236	579	4,298	
1983	January	4,372	2,938	1,434	973	117	856	3,399	
	February	3,691	2,268	1,423	865	262	603	2,825	
	March	3,629	2,232	1,398	801	174	627	2,829	
	April	4,744	3,154	1,590	809	88	721	3,935	
	May	4,898	3,234	1,664	848	280	568	4,049	
	June*	R 5,218	R 3,502	R 1,716	774	144	630	4,443	
	July**	5,751	4,066	1,685	NA	NA	NA	NA	
	AVERAGE	4,624	3,065	1,560	NA	NA	NA	NA	

¹ Includes lease condensate.

² Includes crude oil for storage in the Strategic Petroleum Reserve.

³ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

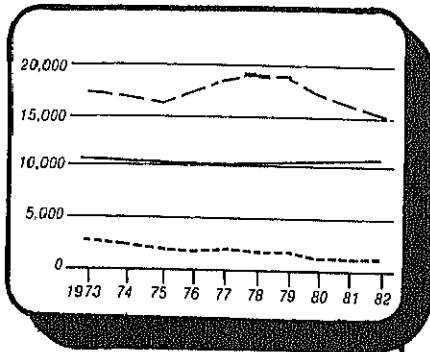
** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

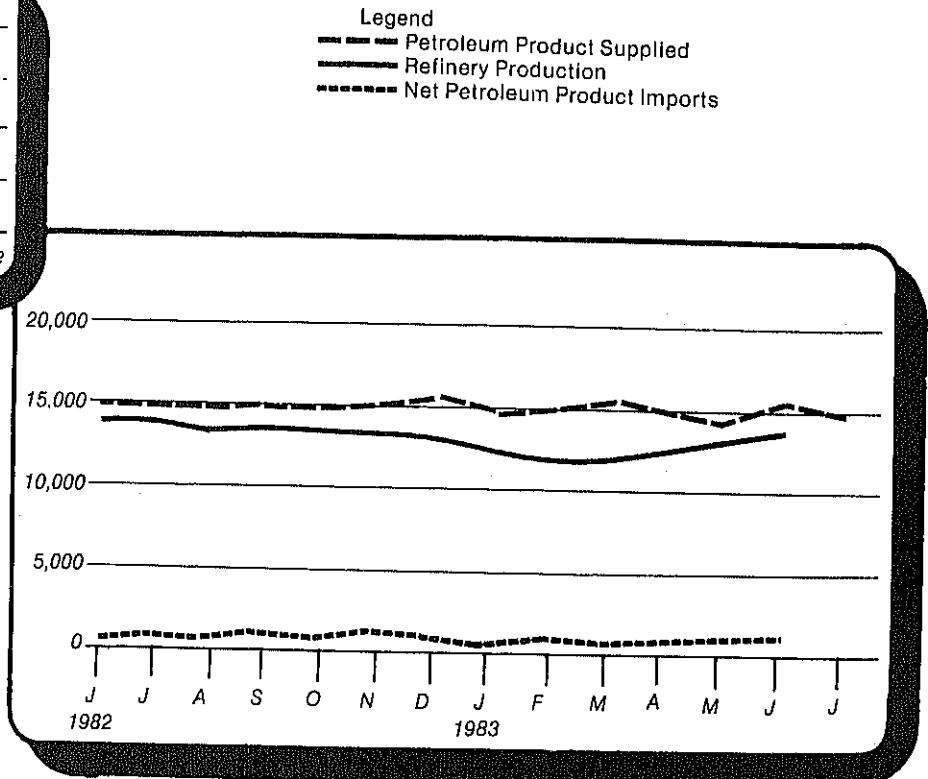
Sources: See "Sources" at the end of this section.

Petroleum Overview

(Thousand Barrels Per Day)



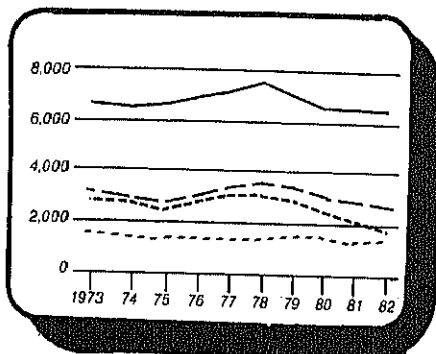
Annual



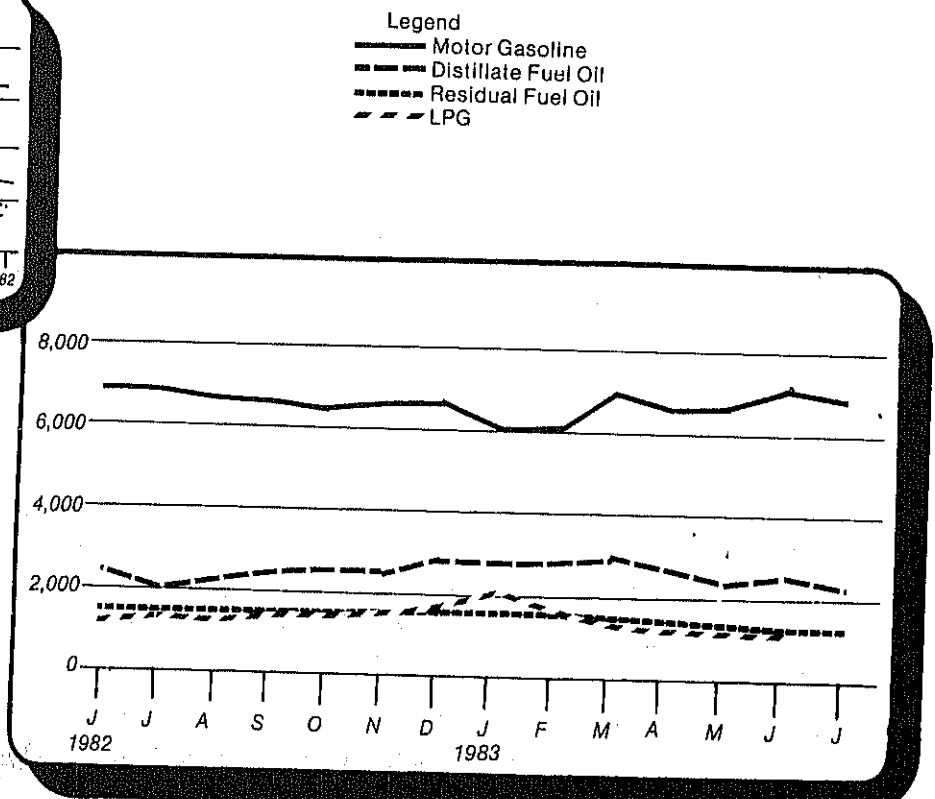
Monthly

Petroleum Products Supplied

(Thousand Barrels Per Day)



Annual

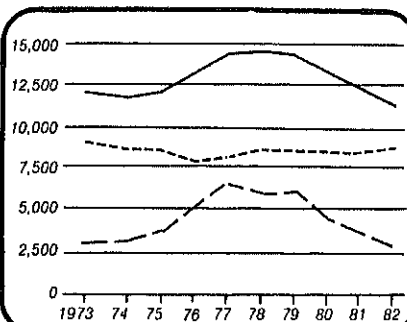


Monthly

Liquefied Petroleum Gases

Crude Oil Supply and Disposition

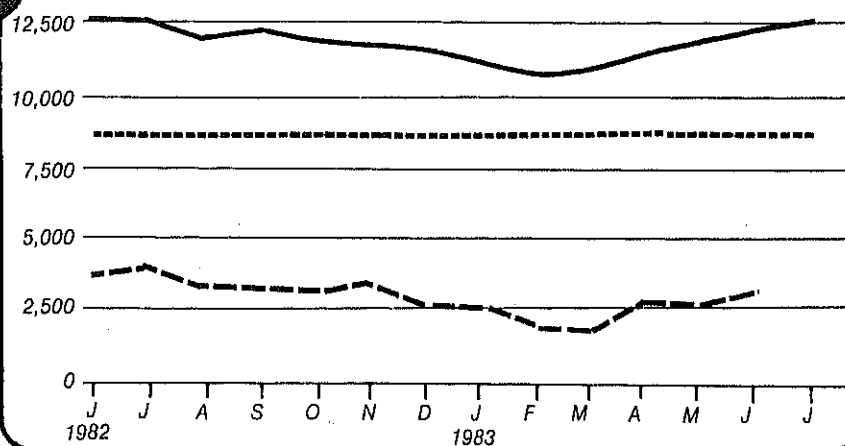
(Thousand Barrels Per Day)



Annual

¹ Excludes SPR Imports

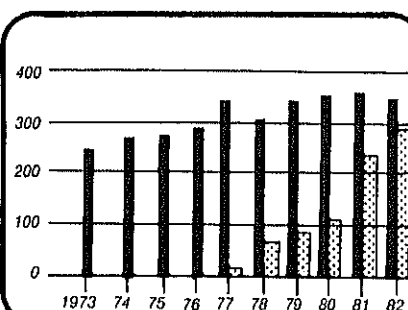
Legend
 — Refinery Inputs
 - - - Domestic Crude Oil Production
 - · - Net Imports



Monthly

Crude Oil Ending Stocks

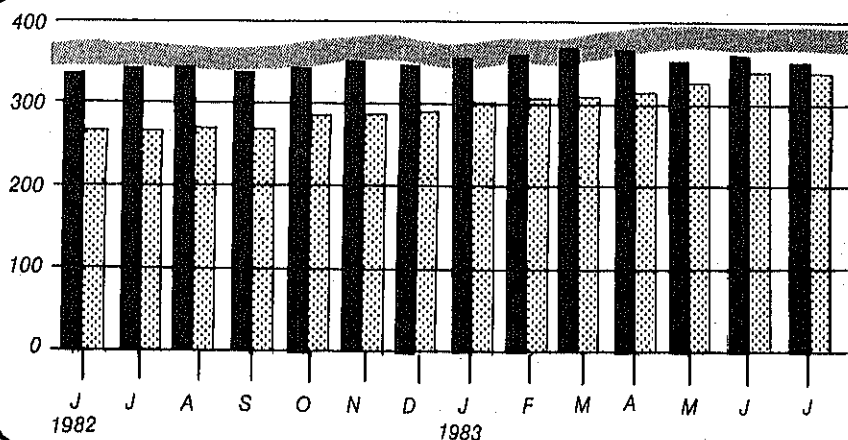
(Millions of Barrels)



Annual

¹ Level and width of Average Stock Ranges for crude oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Legend
 ■ Other Primary
 ■ SPR
 ■ Average Stock Range¹



Monthly 5

Crude Oil¹ Supply and Disposition

		Supply						
		Field Production		Imports			Stock Withdrawal ²	
		Total Domestic	Alaskan	Total	SPR ³	Other	SPR ³	Other
		Thousand Barrels per Day						
								Unac- counted for Crude Oil
1973	AVERAGE	9,208	198	3,244		3,244	11	3
1974	AVERAGE	8,774	193	3,477		3,477	-62	-25
1975	AVERAGE	8,375	191	4,105		4,105	-17	17
1976	AVERAGE	8,132	173	5,287		5,287	-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	34
1981	January	8,540	1,606	4,932	106	4,826	-151	113
	February	8,604	1,619	4,873	80	4,793	-127	-41
	March	8,613	1,618	4,521	140	4,382	-155	154
	April	8,557	1,608	4,338	272	4,066	-444	51
	May	8,501	1,580	4,287	386	3,901	-513	286
	June	8,629	1,632	4,061	318	3,743	-434	49
	July	8,500	1,605	4,296	175	4,121	-324	147
	August	8,583	1,602	4,179	257	3,922	-372	16
	September	8,604	1,607	4,740	435	4,305	-486	-295
	October	8,563	1,596	4,380	453	3,927	-501	166
	November	8,586	1,614	4,046	271	3,774	-259	279
	December	8,585	1,623	4,137	165	3,971	-252	52
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	83
1982	January	8,509	1,705	3,693	170	3,523	-159	101
	February	8,702	1,707	2,990	159	2,830	-213	156
	March	8,667	1,696	2,874	185	2,689	-235	2
	April	8,591	1,691	2,849	190	2,659	-233	231
	May	8,683	1,707	3,309	204	3,105	-176	111
	June	8,646	1,665	3,836	105	3,732	-105	133
	July	8,658	1,710	4,248	97	4,150	-97	-20
	August	8,634	1,697	3,851	208	3,643	-208	189
	September	8,701	1,705	3,636	139	3,497	-143	-210
	October	8,701	1,706	3,670	216	3,454	-216	249
	November	8,697	1,676	3,862	180	3,683	-179	-124
	December	8,598	1,682	3,000	124	2,877	-125	35
	AVERAGE	8,649	1,696	3,488	165	3,323	-174	71
1983	January	8,634	1,698	2,938	219	2,720	-219	238
	February	8,660	1,725	2,268	197	2,071	-197	423
	March	8,677	1,726	2,232	201	2,031	-184	134
	April	8,686	1,710	3,154	205	2,949	-197	191
	May	8,682	1,710	3,234	289	2,945	-293	148
	June*	8,676	1,710	R 3,502	R 190	R 3,312	-188	480
	July**	8,647	1,705	4,066	290	3,776	-278	NA
	AVERAGE	8,666	1,712	3,065	228	2,837	-223	NA

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ³	Crude Losses	Refinery Inputs	Exports	Product Supplied ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	⁵ 265		⁵ 265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	⁵ 466	108	⁵ 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,599	238	NA	606	235	371
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	229	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	193	NA	⁵ 644	294	⁵ 350
	AVERAGE	-59	3	11,774	236	NA			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April	NA	2	11,436	88	68	684	318	366
	May	NA	1	11,789	280	63	681	327	355
	June*	NA	1	R 12,287	144	64	R 686	332	R 354
	July**	NA	NA	12,534	NA	NA	688	341	347
	AVERAGE	NA	NA	11,524	NA	NA			

¹ Includes lease condensate.

² Stocks are totals as of end of period.

³ Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.

⁴ Strategic Petroleum Reserve.

⁵ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis) end of year stocks would be: 1974-265, 1980-483 (Total) and 375 (Other primary), and 1982-644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks ¹		
		Total Produc- tion	Imports ²	Stock With- drawal ^{2 3}	Exports	Product Supplied			Total Motor Gasoline ⁴	Finished Motor Gasoline	
						Total	Unleaded ⁵	Unleaded			
Thousand Barrels per Day								Percent of Total	Millions of Barrels		
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA		209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	⁶	218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA		235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA		231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5		258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0		238	
1979	AVERAGE	6,852	181	2	(⁶)	7,034	2,798	39.8		237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	⁶	261	
1981	January	6,715	138	-421	(⁶)	6,431	3,141	48.8		276	227
	February	6,308	111	-118	1	6,301	3,095	49.1		284	230
	March	6,213	171	-81	(⁶)	6,303	3,097	49.1		285	232
	April	6,114	186	303	(⁶)	6,602	3,284	49.7		272	223
	May	6,122	150	344	1	6,615	3,115	47.1		259	213
	June	6,220	186	622	1	7,028	3,419	48.6		242	194
	July	6,405	151	268	(⁶)	6,823	3,424	50.2		228	186
	August	6,611	124	-95	3	6,637	3,344	50.4		233	189
	September	6,564	169	-70	2	6,662	3,338	50.1		237	191
	October	6,426	147	7	3	6,578	3,257	49.5		236	190
	November	6,564	148	-338	1	6,373	3,198	50.2		248	201
	December	6,586	197	-91	11	6,681	3,444	51.5		253	203
	AVERAGE	6,405	157	28	2	6,588	3,264	49.5			
1982	January	6,167	128	-316	18	5,961	3,067	51.5		261	213
	February	5,899	133	172	8	6,196	3,210	51.8		257	208
	March	5,994	183	334	44	6,466	3,358	51.9		247	198
	April	6,095	185	650	33	6,897	3,495	50.7		221	179
	May	6,319	182	177	23	6,655	3,415	51.3		214	173
	June	6,754	230	-134	14	6,835	3,565	52.2		219	177
	July	6,768	225	-178	24	6,790	3,577	52.7		226	183
	August	6,419	291	-81	16	6,614	3,526	53.3		227	185
	September	6,527	223	-198	22	6,531	3,404	52.1		234	191
	October	6,262	185	-42	15	6,391	3,351	52.4		234	192
	November	6,273	211	101	11	6,574	3,451	52.5		230	189
	December	6,542	178	-165	7	6,549	3,485	53.2	⁶	235	⁶ 194
	AVERAGE	6,338	197	25	20	6,539	3,409	52.1			
1983	January	6,020	148	-186	(⁶)	5,981	3,352	56.0		251	208
	February	5,848	142	32	(⁶)	6,022	3,257	54.1		251	207
	March	5,897	205	765	23	6,843	3,620	52.9		224	184
	April	6,202	273	27	1	6,501	3,505	53.9		221	183
	May	6,386	284	-128	1	6,540	3,547	54.2		225	187
	June*	R 6,646	R 265	R 118	22	R 7,008	3,796	54.2	R	223	R 183
	July**	6,747	241	-202	NA	6,785	NA	NA		228	190
	AVERAGE	6,253	223	61	NA	6,531	NA	NA			

¹ Stocks are totals as of end of period.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes motor gasoline blending components.

⁵ Includes gasohol.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(⁶) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.3.

** Italics denote preliminary data. See Explanatory Note 8.

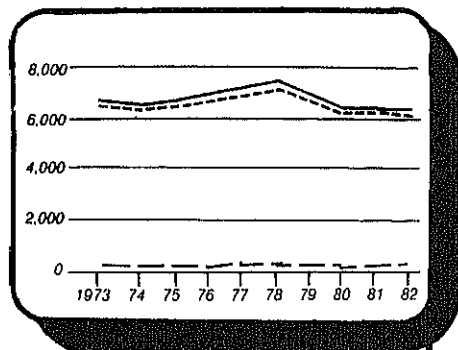
Note: Beginning in January 1981, survey forms were modified.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

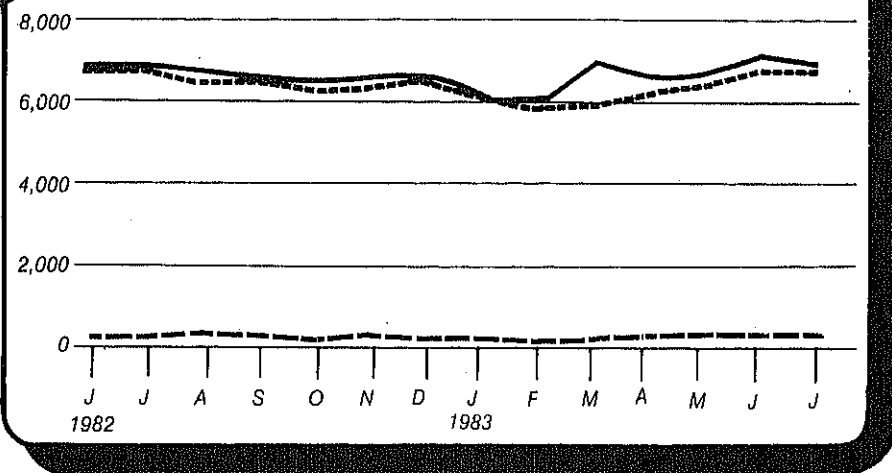
Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



Annual

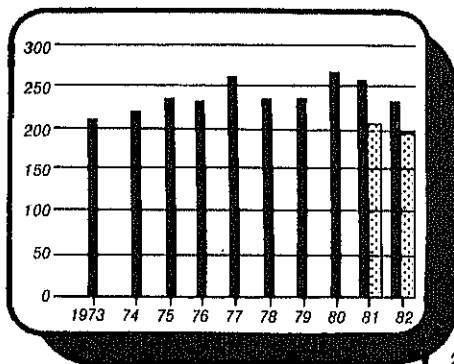
Legend
 — Product Supplied
 - - - Finished Gasoline Production
 . . . Finished Gasoline Imports



Monthly

Motor Gasoline Ending Stocks

(Millions of Barrels)

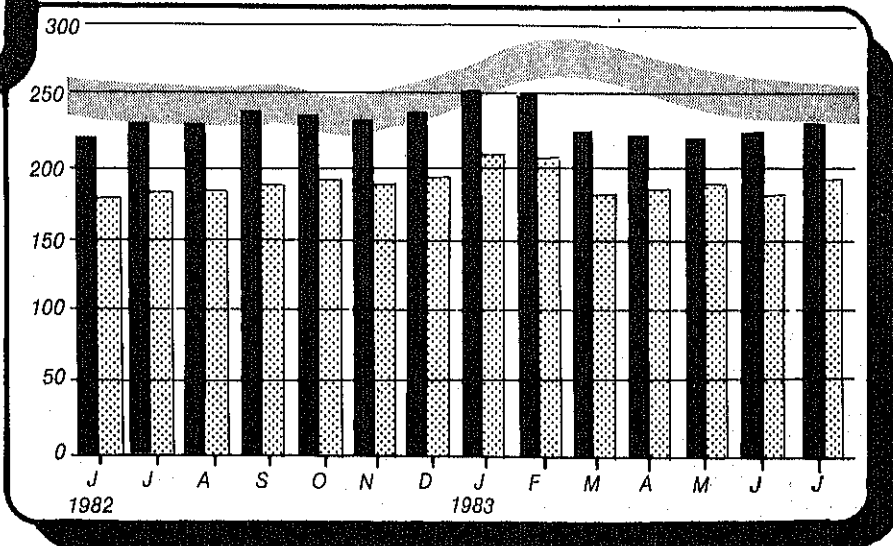


Annual

¹ Includes finished motor gasoline blending components

² Level and width of Average Stock Range for total motor gasoline based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Legend
 ■ Total Motor Gasoline¹
 ■ Finished Motor Gasoline
 ■ Average Stock Range²



Monthly 9

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						
								Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	⁴ 200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	⁴ 205
1981	January	2,989	273	836	11	(⁵)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(⁵)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(⁵)	2,411	172
	June	2,501	225	-270	9	(⁵)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(⁵)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,591	97	876	10	90	3,484	164
	February	2,427	132	805	11	90	3,085	147
	March	2,288	48	682	10	84	2,945	126
	April	2,358	59	612	13	64	2,978	108
	May	2,618	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,058	148
	August	2,507	80	-339	10	40	2,218	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,860	146	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	⁴ 179
	AVERAGE	2,606	93	35	10	74	2,671	
1983	January	2,314	58	561	NA	173	2,760	168
	February	2,136	58	742	NA	105	2,832	147
	March	1,991	42	926	NA	59	2,900	119
	April	2,169	73	518	NA	47	2,713	103
	May	2,444	141	-193	NA	50	2,341	109
	June*	R 2,545	R 175	R -154	NA	40	R 2,526	R 114
	July**	2,641	272	-587	NA	NA	2,277	130
	AVERAGE	2,322	118	253	NA	NA	2,618	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to and pipeline surveys as a result of extensive investigation during the previous years. The major reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated per day. NA = Not available. R = Revised data. components due to independent rounding.

a. See Explanatory Note 8.

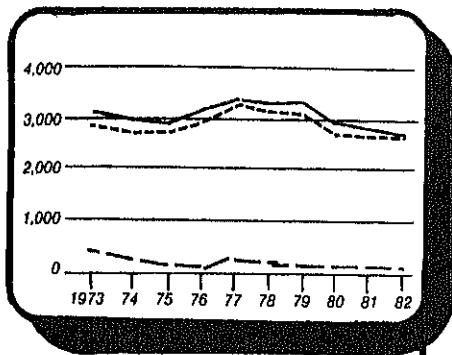
Notes: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

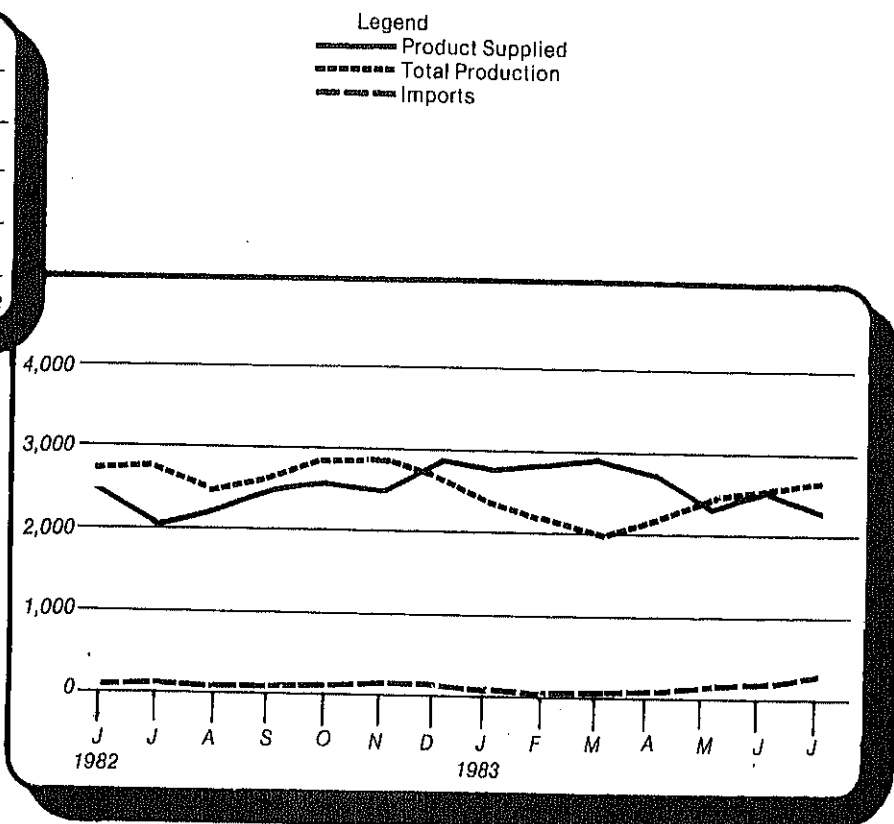
Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)

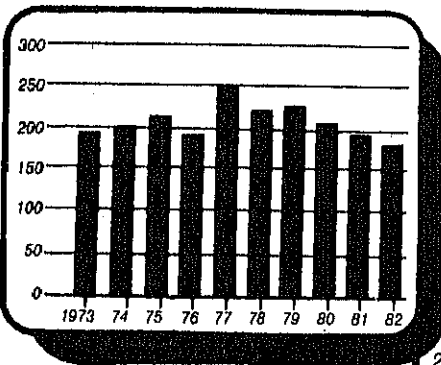


Annual



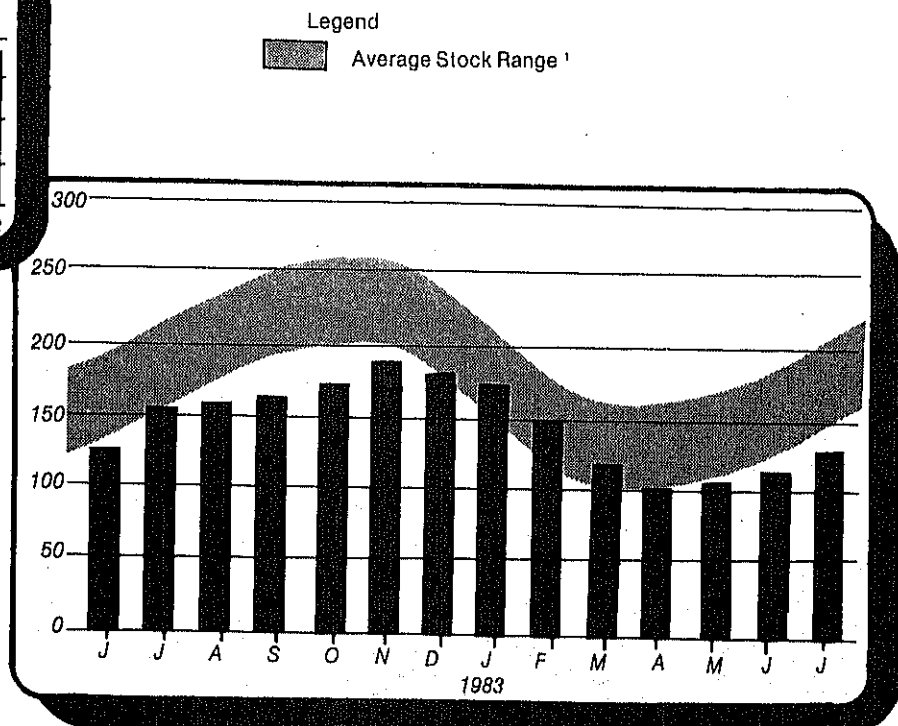
Distillate Fuel Oil Ending Stocks

(Millions of Barrels)



Annual

* Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						
								Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	⁴ 60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	⁴ 92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,235	831	301	53	235	2,185	69
	February	1,186	956	363	53	213	2,344	58
	March	1,123	912	12	53	197	1,903	58
	April	1,166	788	150	52	234	1,923	54
	May	1,128	742	-172	52	191	1,560	59
	June	1,074	652	-57	50	217	1,501	61
	July	1,028	657	56	49	239	1,550	59
	August	965	551	203	47	235	1,531	53
	September	1,008	872	-306	44	148	1,470	62
	October	955	783	-57	43	234	1,490	64
	November	989	837	-94	43	182	1,591	66
	December	989	747	6	43	186	1,598	⁴ 66
	AVERAGE	1,070	776	32	48	209	1,716	
1983	January	935	691	243	NA	294	1,574	61
	February	857	632	270	NA	191	1,568	53
	March	833	686	220	NA	169	1,569	46
	April	942	743	-10	NA	310	1,364	47
	May	930	709	-139	NA	190	1,310	51
	June*	R 832	R 676	R 28	NA	219	R 1,317	R 50
	July**	838	651	6	NA	NA	1,251	48
	AVERAGE	881	684	86	NA	NA	1,421	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

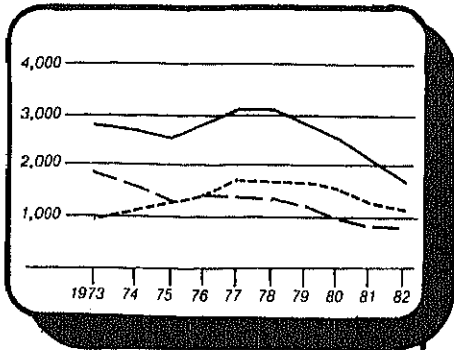
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

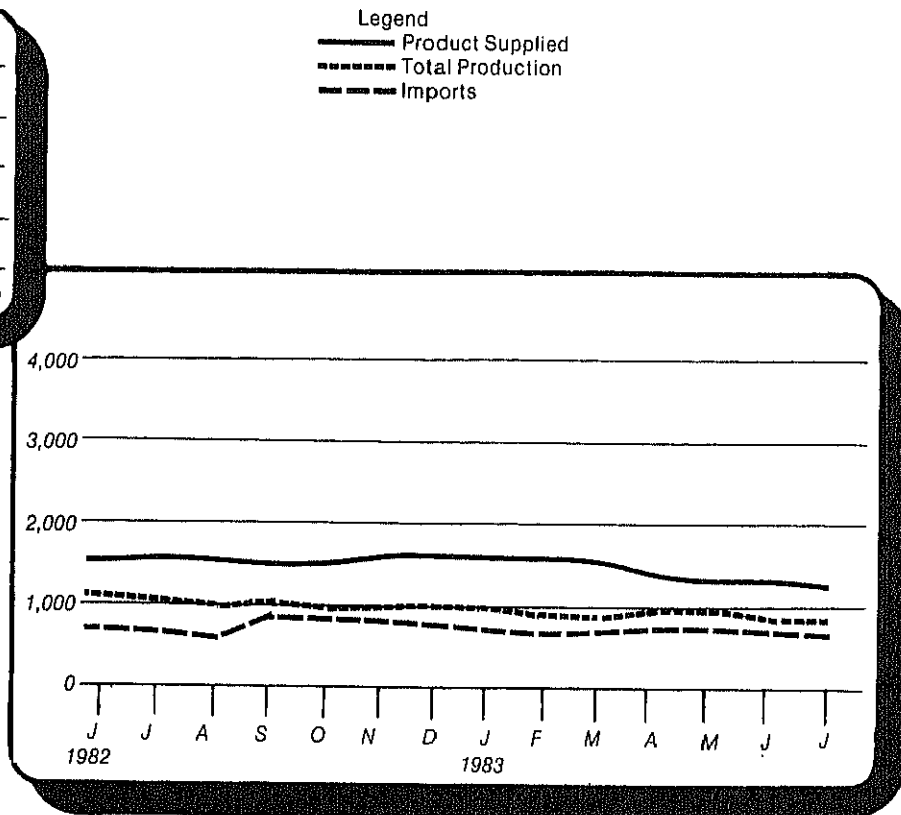
Sources: See "Sources" at the end of this section.

Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



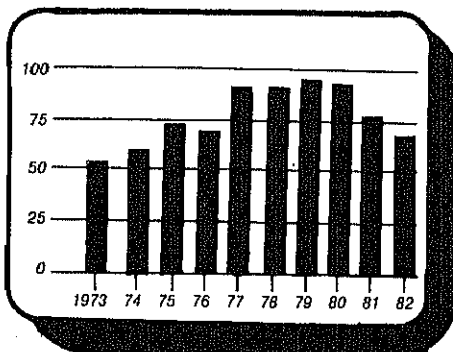
Annual



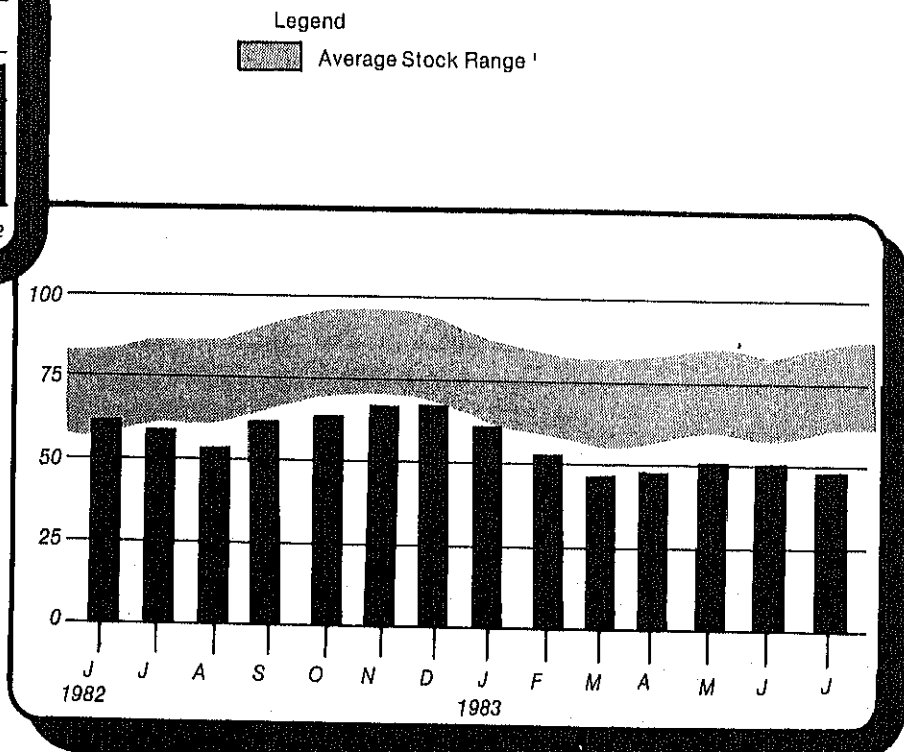
Monthly

Residual Fuel Oil Ending Stocks

(Millions of Barrels)



¹ Level and width of Average Stock Range for residual fuel oil based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly

Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	³ 113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	³ 120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,565	314	443	391	67	1,863	121
	February	1,466	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	108
	April	1,506	188	98	257	77	1,458	105
	May	1,565	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	258	256	395	56	1,642	³ 94
	AVERAGE	1,528	226	111	300	65	1,499	
1983	January	1,662	240	618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March	1,517	166	-51	189	127	1,316	83
	April	1,531	124	-107	198	116	1,232	86
	May	1,545	167	-326	207	84	1,094	96
	June*	1,593	172	-333	205	59	1,169	106
	AVERAGE	1,568	194	-19	225	97	1,421	

¹ Stocks are totals as of end of period.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-113, 1980-128, and 1982-103. Stock withdrawals during 1975,

1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

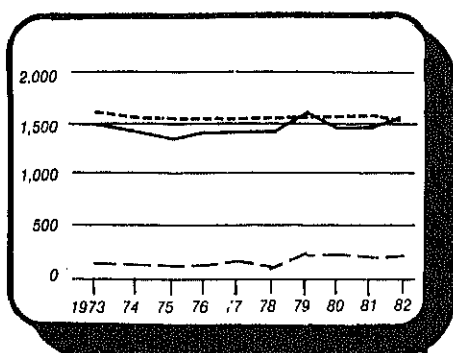
* See Explanatory Note 9.5.

Geographic coverage: The 50 United States and the District of Columbia.

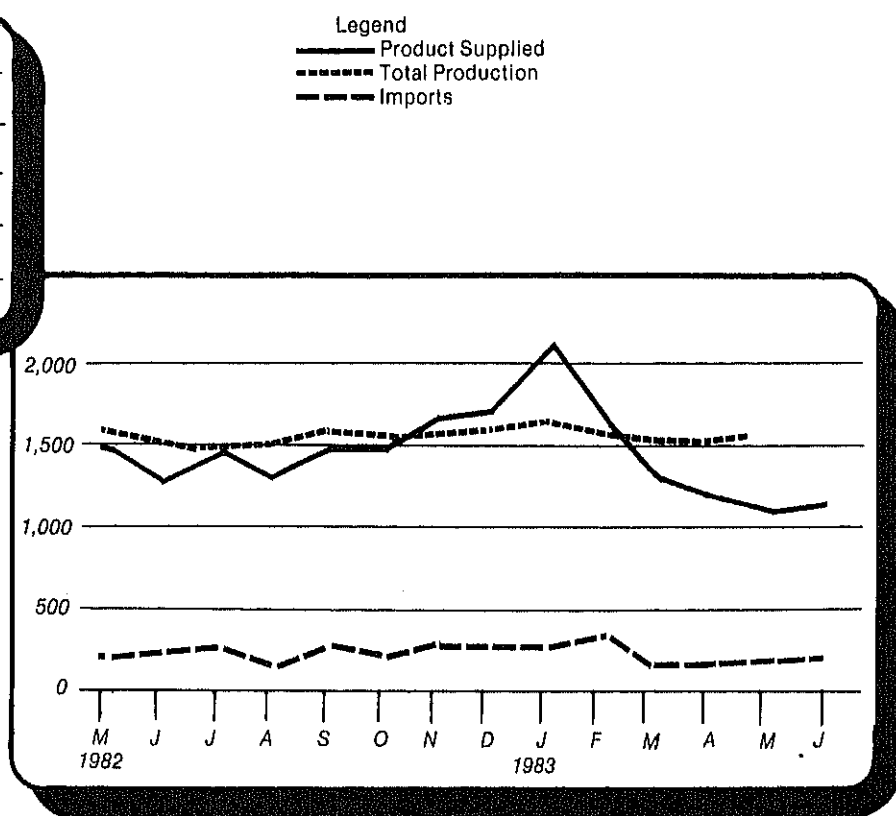
Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



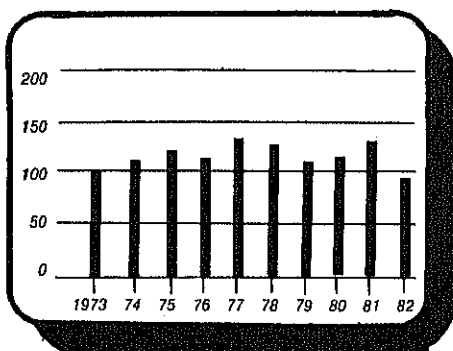
Annual



Monthly

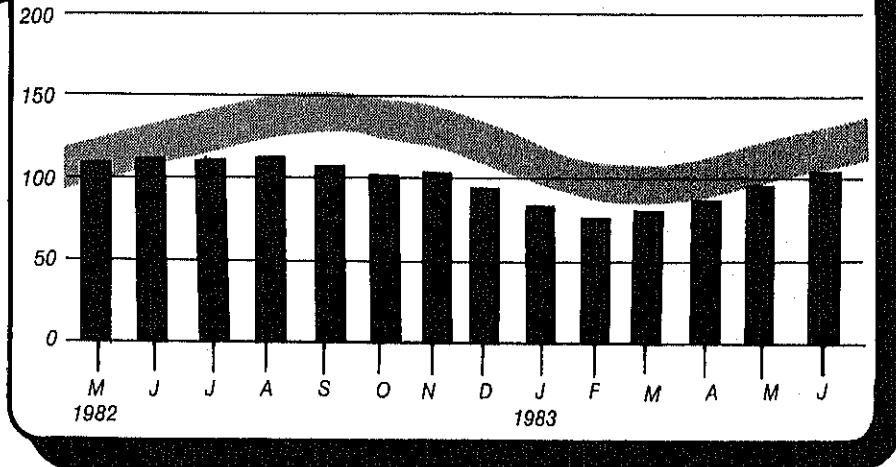
Liquefied Petroleum Gases Ending Stocks

(Millions of Barrels)



Annual

¹ Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly 15

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	⁴ 218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	⁴ 247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,171	269	-7	624	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-191	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,785	285
	June	3,547	315	123	812	216	2,954	281
	July	3,660	408	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	105	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,786	264
	December	3,324	313	366	885	275	2,842	⁴ 253
	AVERAGE	3,453	334	80	787	211	2,869	
1983	January	3,222	297	-371	570	271	2,907	271
	February	3,270	287	-1	680	232	2,645	271
	March	3,400	298	-94	570	249	2,786	273
	April	3,363	377	3	596	247	2,901	273
	May	3,448	364	26	694	242	2,902	273
	June*	3,674	427	99	715	292	3,197	270
	AVERAGE	3,397	342	-58	637	256	2,789	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

² Stocks are totals as of end of period.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.6.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
Thousand Barrels per Day											
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,983
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,284	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	111	289	0	663	376	128	2,859	1,403
February	139	92	693	89	244	0	584	355	102	2,297	1,054
March	91	37	555	155	200	0	522	399	91	2,051	860
April	85	0	511	122	215	0	427	426	85	1,871	740
May	179	0	601	116	236	0	222	422	54	1,830	897
June	115	0	593	94	215	72	537	361	110	2,096	820
July	159	0	660	108	327	69	910	356	95	2,685	965
August	181	0	489	133	271	27	574	299	133	2,107	818
September	179	0	432	57	191	21	477	518	69	1,943	877
October	249	7	494	61	242	108	313	504	106	2,084	810
November	247	14	489	47	283	34	479	528	115	2,235	797
December	155	0	237	12	265	88	462	399	73	1,690	421
AVERAGE	170	26	552	92	248	35	514	412	97	2,146	854
1983											
January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
March	63	0	103	0	138	0	121	425	173	1,023	183
April	228	0	180	(*)	210	0	186	508	125	1,438	409
May	284	0	122	12	324	37	352	444	69	1,645	419
June	300	0	175	40	502	38	402	335	146	1,938	515
AVERAGE	198	0	179	18	274	20	225	401	98	1,414	398

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil processed in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

(*) Less than 500 barrels.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

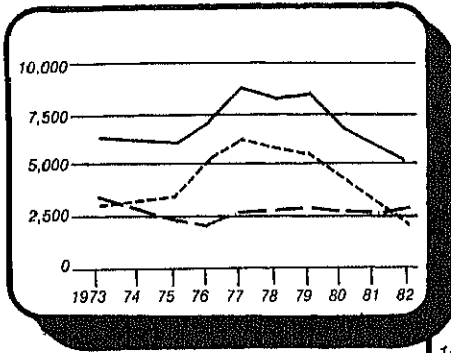
Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other	Total
Thousand Barrels per Day										
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	562	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	58	513	425	179	106	346	62	334	452	2,474
February	67	537	476	221	120	181	38	362	508	2,510
March	43	437	503	189	118	294	62	307	480	2,433
April	82	360	476	184	166	247	36	286	690	2,507
May	77	419	766	152	95	516	47	302	607	2,981
June	32	481	797	148	129	557	58	322	708	3,231
July	64	536	783	158	118	433	38	376	698	3,204
August	80	443	853	145	106	520	24	317	650	3,137
September	92	493	897	195	89	631	51	278	746	3,472
October	45	459	882	148	109	666	52	262	801	3,222
November	51	553	860	212	90	623	81	334	706	3,508
December	88	561	689	174	102	438	48	336	480	2,916
AVERAGE	65	482	685	175	112	456	50	316	627	2,968
1983										
January	68	536	849	218	73	315	40	299	588	2,988
February	92	592	722	179	81	193	50	192	554	2,655
March	86	488	760	187	78	240	43	162	563	2,606
April	167	452	981	216	85	421	20	183	781	3,306
May	135	501	944	153	108	483	42	235	651	3,252
June	137	576	831	181	120	424	48	252	712	3,281
AVERAGE	114	523	849	189	91	348	40	221	642	3,018

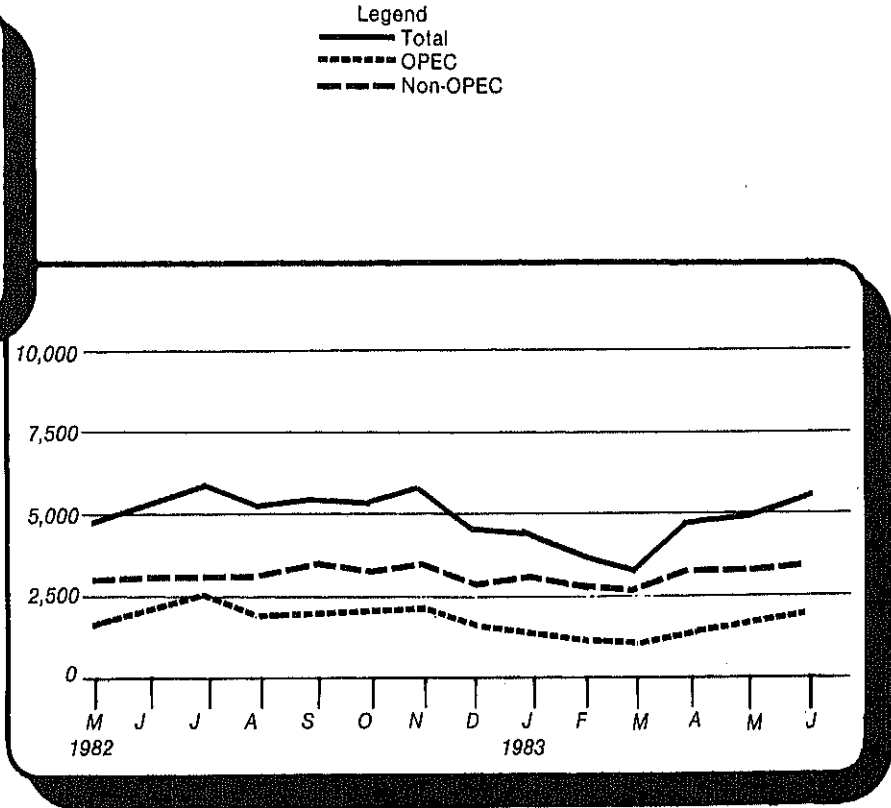
1. Petroleum imported into the United States indirectly from OPEC countries,
 Caribbean and West European areas, as refined
 products which were refined from crude oil produced in OPEC countries.
 2. Rounding.
 3. Equal sum of components due to independent rounding.
 4. In October 1977, Strategic Petroleum Reserve imports are included.
 5. Average: The 50 United States and the District of Columbia.
 6. "Sources" at the end of this section.

Crude Oil (including SPR) and Petroleum Products Imports

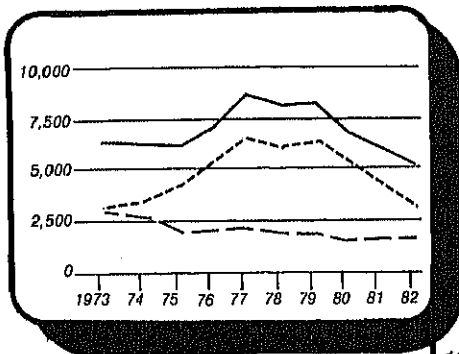
(Thousand Barrels Per Day)



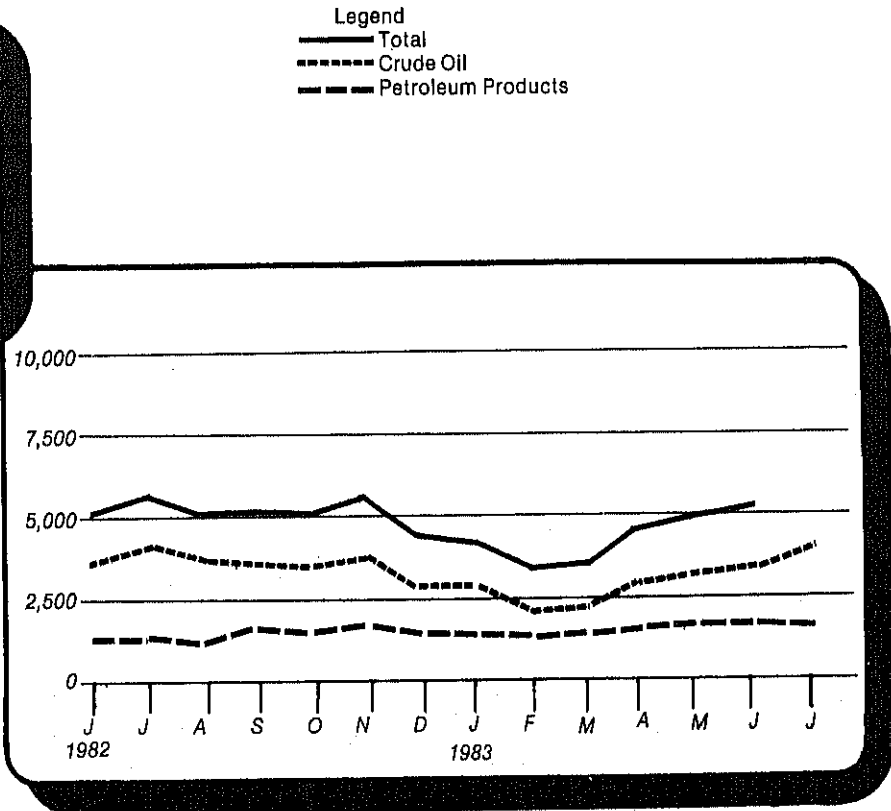
Annual



Monthly



Annual



Monthly

Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1982: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1983 through June 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
6. July 1983: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).
7. January 1983 through July 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies the U.S. Geological Survey. (See Explanatory Note 3).

Detailed Statistics



Table 1. U.S. Petroleum Balance, June 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 51,312	1,710	E 310,085	1,713
(2) Lower 48 States	E 208,980	8,968	E 1,259,080	8,958
(3) Total U.S.	E 260,292	8,676	E 1,569,165	8,869
Net Imports				
(4) Imports (Gross Excluding SPR)	99,359	3,312	484,377	2,676
(5) SPR Imports	5,696	190	39,314	217
(6) Exports	4,306	144	31,988	177
(7) Imports (Net Including SPR)	100,749	3,358	491,725	2,717
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-5,651	-188	-38,657	-214
(9) Other Stock Withdrawal (+) or Addition (-)	755	25	-3,805	-21
(10) Product Supplied and Losses	-1,939	-65	-11,958	-68
(11) Unaccounted for 1	14,407	480	48,087	266
(12) Total Other Sources	7,572	252	-8,333	-35
(13) Crude Input to Refineries	368,813	12,287	2,054,557	11,351
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	45,422	1,514	280,405	1,549
(15) Imports 2	94	3	1,710	9
(16) Stock Withdrawal (+) or Addition (-) 2	-1,129	-38	-3,191	-18
(17) Total NGPL Supply	44,387	1,480	278,924	1,541
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	271	9	-2,942	-18
(19) Imports	9,736	325	43,494	240
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	2,143	71	9,732	54
(21) Refinery Processing Gain 1	15,025	501	85,971	475
(22) Crude Oil Product Supplied	1,924	64	11,671	64
(23) Total Other Liquids	29,099	970	147,926	817
(23) = (18) through (22)				
(24) Total Production of Products 3	442,098	14,737	2,481,408	13,709
(24) = (13) + (17) + (23)				
Net Imports of Refined Products 3				
(25) Imports (Gross)	41,640	1,388	233,156	1,288
(26) Exports	18,914	630	121,053	669
(27) Imports (Net)	22,726	758	112,104	619
(28) Total New Supply of Products	464,824	15,494	2,593,512	14,329
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	-6,395	-213	101,354	560
(30) Total Petroleum Products Supplied for Domestic Use	458,429	15,281	2,694,866	14,889
(30) = (28) + (29)				
(31) Finished Motor Gasoline	210,251	7,008	1,174,198	6,487
(32) Distillate Fuel Oil	75,788	2,526	484,494	2,677
(33) Residual Fuel Oil	39,509	1,317	262,402	1,450
(34) Liquefied Petroleum Gases	35,056	1,169	257,288	1,421
(35) Other 4	95,901	3,197	504,815	2,789
(36) Crude Oil	1,924	64	11,671	64
(37) Total Product Supplied	468,429	15,281	2,694,867	14,889
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR)	353,849	--	353,849	--
(39) Strategic Petroleum Reserve (SPR)	332,484	--	332,484	--
(40) Unfinished Oils	110,118	--	110,118	--
(41) Gasoline Blending Components	40,646	--	40,646	--
(42) Natural Gasoline and Unfractionated Stream 2	14,859	--	14,859	--
(43) Finished Refined Products 3	557,502	--	557,502	--
(44) Total Stocks	1,409,258	--	1,409,258	--

1 A balancing item.

2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

3 For products included see Explanatory Note 9.7.

4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

nd Disposition of Crude Oil and Petroleum Products, June 1983 s of Barrels)

Commodity	Supply				Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 260,292	0	105,056	-4,896	14,407	15	368,613	4,306	1,324
Natural Gas Liquids and LRGs	45,053	10,771	5,261	-11,128	0	0	12,462	1,759	35,736
Natural Gasoline and Isopentane	6,914	0	0	-870	0	0	5,366	0	6,812
Unfractionated Stream	223	0	0	-223	0	0	0	0	7,407
Plant Condensate	885	0	94	-36	0	0	941	0	440
Liquefied Petroleum Gases	37,031	10,771	5,167	-9,999	0	0	6,155	1,759	106,119
Ethane	7,587	625	960	287	0	0	73	(s)	35,056
Propane	13,279	8,335	1,047	-6,365	0	0	108	762	9,396
Butane	6,205	1,614	1,004	-1,898	0	0	4,664	997	15,426
Butane-Propane Mixtures	146	192	930	-185	0	0	253	0	1,265
Ethane-Propane Mixtures	7,043	0	1,225	-170	0	0	0	0	850
Isobutane	2,771	5	0	-1,698	0	0	1,057	0	8,098
Other Liquids	2,143	0	9,736	271	0	0	15,158	0	21
Other Hydrocarbons and Alcohol	2,143	0	0	53	0	0	2,196	0	-3,008
Unfinished Oils	0	0	8,470	2,284	0	0	12,332	0	0
Motor Gasoline Blending Components	0	0	1,266	-2,108	0	0	626	0	-1,578
Aviation Gasoline Blending Components	0	0	0	42	0	0	4	0	-1,468
Finished Petroleum Products	369	400,487	36,473	3,504	0	0	0	17,155	423,778
Finished Motor Gasoline	61	189,331	7,957	3,548	0	0	0	647	210,251
Finished Leaded Motor Gasoline	45	93,763	3,892	-683	0	0	0	647	96,370
Finished Unleaded Motor Gasoline	16	105,568	4,065	4,231	0	0	0	0	113,880
Finished Aviation Gasoline	134	774	(s)	-44	0	0	0	0	864
Naphtha-Type Jet Fuel	0	6,467	0	-199	0	0	0	0	6,268
Kerosene-Type Jet Fuel	0	24,860	746	209	0	0	0	21	25,794
Kerosene	3	2,186	7	185	0	0	0	58	2,323
Distillate Fuel Oil	0	76,363	5,257	-4,629	0	0	0	1,203	75,788
Residual Fuel Oil	0	24,947	20,270	847	0	0	0	6,555	39,509
Naphtha < 400 Deg. for Petro. Feed. Use	0	4,035	441	253	0	0	0	86	4,844
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,802	172	-134	0	0	0	541	7,299
Special Naphthas	118	1,660	930	91	0	0	0	37	2,762
Lubricants	0	4,420	276	395	0	0	0	502	4,589
Waxes	0	522	16	-30	0	0	0	15	493
Petroleum Coke	0	12,901	0	803	0	0	0	7,432	815
Asphalt and Road Oil	0	14,863	378	1,949	0	0	0	32	6,149
Still Gas	0	17,961	0	0	0	0	0	0	17,159
Miscellaneous Products	53	1,395	21	360	0	0	0	28	17,961
Total	307,857	411,258	156,525	-12,149	14,407	15	396,233	23,221	458,429
Total									1,409,258

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January-June 1983
(Thousands of Barrels)

Commodity	Supply					Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 1,569,165	0	523,691	-42,462	48,087	287	2,054,557	31,966	11,671	686,333
Natural Gas Liquids and LRGs	278,249	55,701	36,864	-6,592	0	0	78,268	17,579	268,376	120,778
Natural Gasoline and Isopentane	43,390	0	235	-825	0	0	31,723	0	11,077	6,812
Unfractionated Steam	3,537	0	0	-3,368	0	0	169	0	0	7,407
Plant Condensate	3,183	0	1,475	1,002	0	0	5,648	0	12	440
Liquefied Petroleum Gases	228,139	55,701	35,154	-3,401	0	0	40,728	17,579	257,286	106,119
Ethane	45,662	2,552	7,655	39	0	0	475	1	55,433	5,932
Propane	80,574	48,243	8,994	4,056	0	0	752	11,122	129,993	54,181
Butane	36,967	4,288	8,043	-3,808	0	0	24,107	6,456	14,928	20,490
Butane-Propane Mixtures	1,046	523	3,640	869	0	0	1,261	0	4,817	1,256
Ethane-Propane Mixtures	46,905	0	6,821	-2,253	0	0	0	0	51,473	13,535
Isobutane	16,985	95	0	-2,304	0	0	14,193	0	643	10,725
Other Liquids	9,732	0	43,494	-2,942	0	0	77,712	0	-27,428	150,764
Other Hydrocarbons and Alcohol	9,732	0	0	51	0	0	9,783	0	0	260
Unfinished Oils	0	0	37,899	-4,841	0	0	45,625	0	-12,567	110,118
Motor Gasoline Blending Components	0	0	5,595	1,823	0	0	21,718	0	-14,300	39,919
Aviation Gasoline Blending Components	0	0	0	25	0	0	586	0	-561	467
Finished Petroleum Products	2,157	2,240,807	188,002	104,755	0	0	0	103,474	2,442,248	451,383
Finished Motor Gasoline	488	1,116,099	39,885	19,220	0	0	0	1,475	1,174,198	183,317
Finished Leaded Motor Gasoline	322	509,061	23,225	6,753	0	0	0	1,475	537,886	95,402
Finished Unleaded Motor Gasoline	146	607,038	16,661	12,467	0	0	0	0	636,312	87,915
Finished Aviation Gasoline	382	3,742	210	-164	0	0	0	0	4,170	2,478
Naphtha-Type Jet Fuel	0	38,481	(9)	283	0	0	0	0	38,564	6,906
Kerosene-Type Jet Fuel	1	145,055	4,444	-2,373	0	0	0	0	146,527	34,374
Kerosene	20	19,333	858	2,744	0	0	0	0	22,891	8,048
Distillate Fuel Oil	9	410,469	16,537	71,774	0	0	0	0	484,494	113,805
Residual Fuel Oil	0	160,818	124,903	18,144	0	0	0	0	282,402	50,085
Naphtha < 400 Deg. for Petro. Feed. Use	0	24,706	2,207	98	0	0	0	0	41,463	2,097
Other Oils > 400 Deg. for Petro. Feed. Use	0	47,987	179	83	0	0	0	0	2,646	1,869
Special Naphthas	539	9,618	3,395	227	0	0	0	0	431	3,247
Lubricants	0	25,024	1,335	1,447	0	0	0	0	2,807	11,734
Waxes	0	2,572	148	-29	0	0	0	0	114	815
Petroleum Coke	0	73,118	0	572	0	0	0	0	2,677	6,149
Asphalt and Road Oil	0	58,514	919	-7,802	0	0	0	0	38,292	25,071
Still Gas	0	95,314	0	0	0	0	0	0	51,411	0
Miscellaneous Products	738	9,857	2,981	531	0	0	0	170	13,937	1,368
Total	1,859,303	2,296,508	802,052	52,759	48,087	287	2,210,537	153,018	2,694,867	1,409,258

¹ Unaccounted for crude oil is a balancing item.

(9) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, June 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,676	0	3,502	-163	480	1	12,287	144	64
Natural Gas Liquids and LRGs	1,502	359	175	-371	0	0	415	59	1,191
Natural Gasoline and Isopentane	230	0	0	-29	0	0	179	0	23
Unfractionated Stream	7	0	0	-7	0	0	0	0	(s)
Plant Condensate	29	0	3	-1	0	0	31	0	(s)
Liquefied Petroleum Gases	1,234	359	172	-333	0	0	205	59	1,169
Ethane	253	21	32	10	0	0	2	(s)	313
Propane	443	278	35	-212	0	0	4	25	514
Butane	207	54	33	-63	0	0	155	33	42
Butane-Propane Mixtures	5	6	31	-5	0	0	8	0	28
Ethane-Propane Mixtures	235	0	41	-6	0	0	0	0	270
Isobutane	92	(s)	0	-57	0	0	35	0	1
Other Liquids	71	0	325	9	0	0	505	0	-100
Other Hydrocarbons and Alcohol	71	0	0	2	0	0	73	0	0
Unfinished Oils	0	0	282	76	0	0	411	0	-53
Motor Gasoline Blending Components	0	0	42	-70	0	0	21	0	-49
Aviation Gasoline Blending Components	0	0	0	1	0	0	(s)	0	1
Finished Petroleum Products	12	13,350	1,216	120	0	0	0	572	14,126
Finished Motor Gasoline	2	6,644	265	118	0	0	0	22	7,008
Finished Leaded Motor Gasoline	1	3,125	130	-23	0	0	0	22	3,212
Finished Unleaded Motor Gasoline	1	3,519	136	141	0	0	0	0	3,796
Finished Aviation Gasoline	4	26	(s)	-1	0	0	0	0	29
Naphtha-Type Jet Fuel	0	216	0	-7	0	0	0	(s)	209
Kerosene-Type Jet Fuel	0	829	25	7	0	0	0	1	860
Kerosene	(s)	73	(s)	6	0	0	0	2	77
Distillate Fuel Oil	0	2,545	175	-154	0	0	0	40	2,526
Residual Fuel Oil	0	832	676	28	0	0	0	219	1,317
Naphtha < 400 Deg. for Petro. Feed. Use	0	134	15	8	0	0	0	3	155
Other Oils > 400 Deg. for Petro. Feed. Use	0	260	6	-4	0	0	0	18	243
Special Naphthas	4	55	31	3	0	0	0	1	92
Lubricants	0	147	9	13	0	0	0	17	153
Waxes	0	17	1	-1	0	0	0	1	16
Petroleum Coke	0	430	0	27	0	0	0	248	209
Asphalt and Road Oil	0	495	13	65	0	0	0	1	572
Still Gas	0	599	0	0	0	0	0	0	599
Miscellaneous Products	2	46	1	12	0	0	0	1	60
Total	10,262	13,709	5,218	-405	480	1	13,208	774	15,281

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-June 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,669	0	2,893	-235	266	2	11,351	177	64
Natural Gas Liquids and LRGs	1,537	308	204	-36	0	0	432	97	1,483
Natural Gasoline and Isopentane	240	0	1	-5	0	0	175	0	61
Unfractionated Stream	20	0	0	-19	0	0	1	0	(s)
Plant Condensate	18	0	8	6	0	0	31	0	(s)
Liquefied Petroleum Gases	1,260	308	194	-19	0	0	225	97	1,421
Ethane	252	14	42	(s)	0	0	3	(s)	306
Propane	445	267	50	22	0	0	4	61	718
Butane	204	24	44	-21	0	0	133	36	82
Butane-Propane Mixtures	6	3	20	5	0	0	7	0	27
Ethane-Propane Mixtures	259	0	38	-12	0	0	0	0	284
Isobutane	94	1	0	-13	0	0	78	0	4
Other Liquids	54	0	240	-16	0	0	429	0	-152
Other Hydrocarbons and Alcohol	54	0	0	(s)	0	0	54	0	0
Unfinished Oils	0	0	209	-27	0	0	252	0	-69
Motor Gasoline Blending Components	0	0	31	10	0	0	120	0	-79
Aviation Gasoline Blending Components	0	0	0	(s)	0	0	3	0	-3
Finished Petroleum Products	12	12,380	1,094	579	0	0	0	572	13,493
Finished Motor Gasoline	3	6,166	220	106	0	0	0	8	6,487
Finished Leaded Motor Gasoline	2	2,812	128	37	0	0	0	8	2,972
Finished Unleaded Motor Gasoline	1	3,354	92	69	0	0	0	0	3,516
Finished Aviation Gasoline	2	21	1	-1	0	0	0	0	23
Naphtha-Type Jet Fuel	0	213	(s)	2	0	0	0	1	213
Kerosene-Type Jet Fuel	(s)	801	25	-13	0	0	0	3	810
Kerosene	(s)	107	5	15	0	0	0	(s)	126
Distillate Fuel Oil	(s)	2,268	91	397	0	0	0	79	2,677
Residual Fuel Oil	0	888	690	100	0	0	0	229	1,450
Naphtha < 400 Deg. for Petro. Feed, Use	0	136	12	1	0	0	0	4	145
Other Oils > 400 Deg. for Petro. Feed, Use	0	265	1	(s)	0	0	0	15	252
Special Naphthas	3	53	19	1	0	0	0	2	74
Lubricants	0	138	7	8	0	0	0	16	138
Waxes	0	15	1	(s)	0	0	0	1	15
Petroleum Coke	0	404	0	3	0	0	0	212	196
Asphalt and Road Oil	0	323	5	-43	0	0	0	1	284
Still Gas	0	527	0	0	0	0	0	0	527
Miscellaneous Products	4	54	16	3	0	0	0	1	77
Total	10,272	12,688	4,431	291	266	2	12,213	845	14,889

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, June 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 2,412	0	26,114	133	454	4,095	3	33,205	0	0	16,084
Natural Gas Liquids and LRGs	866	1,364	229	-369	0	1,336	0	123	65	3,238	4,919
Liquefied Petroleum Gases	736	1,364	229	-367	0	1,336	0	107	65	3,126	4,870
Other Products ²	130	0	0	-2	0	0	0	16	0	112	49
Other Liquids	7	0	2,167	581	0	1,148	0	4,534	0	-631	17,871
Other Hydrocarbons and Alcohol	7	0	0	41	0	0	0	48	0	0	36
Unfinished Oils	0	0	1,955	815	0	1,069	0	4,240	0	-401	13,320
Motor Gasoline Blending Components	0	0	212	-300	0	79	0	246	0	-255	4,515
Aviation Gasoline Blending Components	0	0	0	25	0	0	0	0	0	25	0
Finished Petroleum Products	54	38,308	29,186	220	0	69,025	0	0	433	136,361	144,918
Finished Motor Gasoline	54	19,076	6,281	2,634	0	43,312	0	0	1	71,356	56,765
Finished Leaded Motor Gasoline	44	7,648	2,659	-418	0	18,492	0	0	1	28,424	29,982
Finished Unleaded Motor Gasoline	10	11,428	3,621	3,052	0	24,820	0	0	0	42,931	26,783
Finished Aviation Gasoline	0	33	(\$)	-59	0	138	0	0	0	112	604
Naphtha-Type Jet Fuel	0	594	0	115	0	402	0	0	0	436	0
Kerosene-Type Jet Fuel	0	984	596	623	0	7,865	0	0	0	10,068	8,307
Kerosene	0	-30	7	280	0	248	0	0	1	504	3,561
Distillate Fuel Oil	0	7,802	4,513	-3,929	0	13,594	0	0	0	21,979	41,131
Residual Fuel Oil	0	2,638	16,706	-121	0	2,261	0	0	(\$)	21,483	23,968
Naphtha and Other Oils for Petrochem. Feedstock	0	345	33	14	0	31	0	0	45	378	33
Special Naphthas	0	39	455	56	0	281	0	0	4	838	743
Lubricants	0	605	232	348	0	360	0	0	91	1,454	3,109
Waxes	0	93	3	8	0	0	0	0	5	99	162
Petroleum Coke	0	1,108	0	66	0	0	0	0	246	928	767
Asphalt and Road Oil	0	3,043	359	143	0	315	0	0	27	3,832	5,040
Still Gas	0	1,754	0	0	0	0	0	0	0	1,754	0
Miscellaneous Products	0	224	2	42	0	208	0	0	12	465	292
Total	3,339	39,672	57,697	565	454	75,604	3	37,862	498	138,967	183,792

¹ Unaccounted for crude oil is a balancing item.² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(\$) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, June 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 30,750	0	15,054	3,626	34,564	1,658	6	84,866	780	0	78,430
Natural Gas Liquids and LRGs	8,573	2,240	3,203	-4,070	0	6,623	0	3,676	391	12,502	39,574
Liquefied Petroleum Gases	8,624	2,240	3,203	-4,200	0	4,928	0	2,214	391	12,190	35,744
Other Products ²	-51	0	0	130	0	1,695	0	1,462	0	312	3,830
Other Liquids	1,394	0	491	506	0	1,010	0	2,697	0	704	26,622
Other Hydrocarbons and Alcohol	1,394	0	0	2	0	0	0	1,396	0	0	117
Unfinished Oils	0	0	228	1,080	0	10	0	353	0	965	18,028
Motor Gasoline Blending Components	0	0	263	-553	0	1,000	0	971	0	-261	8,259
Aviation Gasoline Blending Components	0	0	0	-23	0	0	0	-23	0	0	218
Finished Petroleum Products	7	93,222	1,646	3,182	0	19,881	0	0	374	117,564	117,788
Finished Motor Gasoline	0	54,821	291	1,483	0	12,261	0	0	0	68,856	55,440
Finished Leaded Motor Gasoline	0	27,611	240	517	0	6,939	0	0	0	35,307	29,419
Finished Unleaded Motor Gasoline	0	27,210	51	966	0	5,322	0	0	0	33,549	26,021
Finished Aviation Gasoline	0	118	0	39	0	151	0	0	0	308	575
Naphtha-Type Jet Fuel	0	930	0	-118	0	161	0	0	0	973	1,639
Kerosene-Type Jet Fuel	0	4,025	0	-291	0	1,003	0	0	0	4,737	8,448
Kerosene	0	-36	0	165	0	40	0	0	0	169	1,792
Distillate Fuel Oil	0	17,958	600	843	0	5,297	0	0	1	24,697	29,563
Residual Fuel Oil	0	1,875	581	-193	0	54	0	0	0	2,317	3,741
Naphtha and Other Oils for Petro. Feed	0	523	47	48	0	37	0	0	54	601	255
Special Naphthas	0	388	100	-206	0	175	0	0	5	452	728
Lubricants	0	677	8	71	0	253	0	0	18	991	2,055
Waxes	0	60	4	-16	0	0	0	0	(s)	48	92
Petroleum Coke	0	3,171	0	458	0	0	0	0	293	3,336	1,598
Asphalt and Road Oil	0	4,371	9	904	0	602	0	0	2	5,883	11,707
Still Gas	0	4,173	0	0	0	0	0	0	0	4,173	0
Miscellaneous Products	7	168	5	-5	0	-153	0	0	1	21	155
Total	40,724	95,462	20,395	3,244	34,564	29,172	6	91,239	1,546	130,770	262,414

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, June 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 124,995	0	52,422	-4,576	-18,125	14,384	10	169,068	0	22	488,806
Natural Gas Liquids and LRGs	32,235	5,512	930	-6,594	0	-7,101	0	7,532	1,204	16,246	73,102
Liquefied Petroleum Gases	26,240	5,512	930	-5,340	0	-6,299	0	3,111	1,204	16,728	62,955
Other Products ²	5,995	0	0	-1,254	0	-802	0	4,421	0	-482	10,147
Other Liquids	387	0	5,980	243	0	-2,158	0	8,090	0	-3,638	67,557
Other Hydrocarbons and Alcohol	387	0	0	10	0	0	0	397	0	0	100
Unfinished Oils	0	0	5,784	645	0	-1,079	0	6,712	0	-1,362	50,504
Motor Gasoline Blending Components	0	0	197	-446	0	-1,079	0	960	0	-2,288	16,758
Aviation Gasoline Blending Components	0	0	0	34	0	0	0	21	0	13	195
Finished Petroleum Products	299	184,114	3,125	-248	0	-92,173	0	0	9,043	86,074	123,942
Finished Motor Gasoline	0	87,704	0	-184	0	-57,267	0	0	627	29,626	47,895
Finished Leaded Motor Gasoline	0	40,369	0	-218	0	-26,345	0	0	627	13,179	24,120
Finished Unleaded Motor Gasoline	0	47,335	0	34	0	-30,922	0	0	0	16,447	23,775
Finished Aviation Gasoline	134	301	0	23	0	-316	0	0	0	142	657
Naphtha-Type Jet Fuel	0	3,180	0	-122	0	-692	0	0	(s)	2,366	2,725
Kerosene-Type Jet Fuel	0	12,191	28	-685	0	-9,525	0	0	0	2,009	11,724
Kerosene	3	2,139	0	-275	0	-288	0	0	57	1,522	2,299
Distillate Fuel Oil	0	35,995	32	-971	0	-19,178	0	0	923	14,955	29,728
Residual Fuel Oil	0	10,847	2,135	965	0	-2,868	0	0	2,541	8,538	13,533
Naphtha and Other Oils for Petro. Feed	0	10,197	533	139	0	-68	0	0	359	10,442	3,019
Special Naphthas	118	1,150	356	217	0	-466	0	0	25	1,349	1,431
Lubricants	0	2,670	36	-214	0	-573	0	0	343	1,576	5,308
Waxes	0	298	1	-26	0	0	0	0	7	266	479
Petroleum Coke	0	4,825	0	-15	0	0	0	0	4,150	660	797
Asphalt and Road Oil	0	4,195	0	687	0	-917	0	0	(s)	3,965	3,631
Still Gas	0	7,615	0	0	0	0	0	0	0	7,615	0
Miscellaneous Products	44	807	5	213	0	-15	0	0	11	1,043	716
Total	157,916	189,626	62,457	-11,175	-18,125	-87,048	10	184,690	10,247	98,704	753,407

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, June 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 17,013	0	1,506	43	-5,258	0	0	13,297	0	7	14,812
Natural Gas Liquids and LRGs	2,221	119	379	34	0	-858	0	452	0	1,443	1,094
Liquefied Petroleum Gases	812	119	285	33	0	35	0	304	0	980	517
Other Products ²	1,409	0	94	1	0	-893	0	148	0	463	577
Other Liquids	2	0	147	383	0	0	0	-149	0	681	4,908
Other Hydrocarbons and Alcohol	2	0	0	-1	0	0	0	1	0	0	1
Unfinished Oils	0	0	147	313	0	0	0	-238	0	698	2,860
Motor Gasoline Blending Components	0	0	0	71	0	0	0	88	0	-17	2,047
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	9	13,693	112	1,156	0	-210	0	0	3	14,758	12,535
Finished Motor Gasoline	7	7,156	72	593	0	-291	0	0	0	7,537	4,664
Finished Leaded Motor Gasoline	1	4,425	71	369	0	-254	0	0	0	4,612	2,964
Finished Unleaded Motor Gasoline	6	2,731	1	224	0	-37	0	0	0	2,925	1,700
Finished Aviation Gasoline	0	29	0	-2	0	27	0	0	0	54	54
Naphtha-Type Jet Fuel	0	355	0	-20	0	-87	0	0	0	248	367
Kerosene-Type Jet Fuel	0	691	0	10	0	387	0	0	0	1,088	754
Kerosene	0	2	0	0	0	0	0	0	0	2	27
Distillate Fuel Oil	0	3,599	31	148	0	-246	0	0	0	3,532	2,801
Residual Fuel Oil	0	246	9	68	0	0	0	0	0	323	437
Naphtha and Other Oils for Petro. Feed	0	0	0	1	0	0	0	0	(s)	1	3
Special Naphthas	0	4	0	-1	0	0	0	0	0	3	15
Lubricants	0	30	0	8	0	0	0	0	2	36	72
Waxes	0	9	0	0	0	0	0	0	0	9	4
Petroleum Coke	0	263	0	-15	0	0	0	0	0	248	952
Asphalt and Road Oil	0	772	0	365	0	0	0	0	1	1,136	2,384
Still Gas	0	513	0	0	0	0	0	0	0	513	0
Miscellaneous Products	2	24	1	1	0	0	0	0	(s)	27	1
Total	19,245	13,812	2,144	1,616	-5,258	-1,068	0	13,600	3	16,889	33,349

1. Unaccounted for crude oil is a balancing item.

2. Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, June 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 85,122	0	9,959	-4,122	2,772	-20,137	-4	68,177	3,526	1,895	88,201
Natural Gas Liquids and LRGs	1,158	1,536	520	-129	0	0	0	679	99	2,307	2,089
Liquefied Petroleum Gases	619	1,536	520	-125	0	0	0	419	99	2,032	2,033
Other Products ²	539	0	0	-4	0	0	0	260	0	275	56
Other Liquids	353	0	950	-1,442	0	0	0	-14	0	-125	33,806
Other Hydrocarbons and Alcohol	353	0	0	1	0	0	0	354	0	0	6
Unfinished Oils	0	0	356	-569	0	0	0	1,265	0	-1,478	25,406
Motor Gasoline Blending Components	0	0	594	-880	0	0	0	-1,639	0	1,353	8,340
Aviation Gasoline Blending Components	0	0	0	6	0	0	0	6	0	0	54
Finished Petroleum Products	0	71,150	2,403	-706	0	3,477	0	0	7,303	69,021	52,200
Finished Motor Gasoline	0	30,574	1,313	-978	0	1,985	0	0	19	32,876	18,553
Finished Leaded Motor Gasoline	0	13,710	921	-933	0	1,168	0	0	19	14,847	8,917
Finished Unleaded Motor Gasoline	0	16,864	392	-45	0	817	0	0	0	18,028	9,636
Finished Aviation Gasoline	0	293	0	-45	0	0	0	0	0	248	588
Naphtha-Type Jet Fuel	0	1,408	0	-54	0	216	0	0	0	1,570	1,739
Kerosene-Type Jet Fuel	0	6,969	122	552	0	270	0	0	21	7,891	5,141
Kerosene	0	111	0	15	0	0	0	0	0	126	369
Distillate Fuel Oil	0	11,009	82	-720	0	533	0	0	279	10,625	10,582
Residual Fuel Oil	0	9,341	840	128	0	553	0	0	4,014	6,848	8,406
Naphtha and Other Oils for Petro. Feed	0	772	0	-83	0	0	0	0	168	521	656
Special Naphthas	0	79	19	25	0	0	0	0	3	120	330
Lubricants	0	438	(s)	182	0	-40	0	0	48	532	1,190
Waxes	0	62	8	4	0	0	0	0	4	70	78
Petroleum Coke	0	3,534	0	309	0	0	0	0	2,743	1,100	2,035
Asphalt and Road Oil	0	2,482	11	-150	0	0	0	0	1	2,342	2,309
Still Gas	0	3,906	0	0	0	0	0	0	0	3,906	0
Miscellaneous Products	0	172	8	109	0	-40	0	0	4	245	224
Total	86,633	72,686	13,832	-6,399	2,772	-16,660	-4	68,842	10,928	73,098	176,296

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month,¹ April 1983
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,757	59
New York	E 68	2
Pennsylvania	E 352	12
Virginia	E 4	(s)
West Virginia	314	10
Adjustment 2	-68	-2
Total PAD District I	E 2,427	81
PAD District II		
Illinois	2,352	78
Indiana	620	21
Kansas	5,982	199
Kentucky	663	22
Michigan	2,814	94
Missouri	E 17	1
Nebraska	530	18
North Dakota	4,269	142
Ohio	E 1,197	40
Oklahoma	13,678	456
South Dakota	96	3
Tennessee	96	3
Adjustment 2	-1,753	-58
Total PAD District II	E 30,561	1,019
PAD District III		
Alabama	1,561	52
Arkansas	E 1,549	52
Louisiana		
Gulf Coast	E 35,677	1,189
Rest Of State	2,825	94
Total Louisiana	E 38,502	1,283
Mississippi	2,534	84
New Mexico		
Northwestern	513	17
Southeastern	5,662	189
Total New Mexico	6,175	206
Texas		
TRRC District 01	2,007	67
TRRC District 02	3,308	110
TRRC District 03	E 11,018	367
TRRC District 04	2,223	74
TRRC District 05	701	23
TRRC District 06, excluding East Texas	3,497	117
TRRC District 07B	2,774	92
TRRC District 07C	2,862	95
TRRC District 08	19,016	634
TRRC District 08A	18,819	627
TRRC District 09	3,156	105
TRRC District 10	1,751	58
East Texas	4,261	142
Total Texas	E 75,383	2,513
Adjustment 2	-287	-10
Total PAD District III	E 125,427	4,161

--Continued

PAD District and State	Production	
	Total	Daily Average
PAD District IV		
Colorado	2,313	77
Montana	E 2,542	85
Utah	E 1,928	64
Wyoming	E 9,297	310
Adjustment 2	849	28
Total PAD District IV	E 16,929	564
PAD District V		
Alaska		
South Alaska	2,050	68
North Slope	49,572	1,652
Adjustment for Alaska ²	-322	-11
Total Alaska	51,300	1,710
Arizona	12	(s)
California		
Central Coastal	6,287	210
East Central	20,568	686
North	15	1
South	6,430	214
Total California	33,300	1,110
Nevada	46	2
Adjustment for Arizona, California, and Nevada ²	590	20
Total PAD District V	E 85,248	2,842
United States Total	E 260,592	8,686

¹ Includes the following offshore production (thousands of barrels):

Alaska: 1,797;
California: Federal- 2,536, State- 3,133;
Louisiana: Federal- E 23,578, State- 2,099;
Texas: Federal- E 1,798, State- 142;
U.S. Total- 35,083.
² These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.
(s) Less than 500 barrels.
Sources: See Explanatory Notes on Data Collection and Estimation.
E = Estimated.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, June 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III			PAD District IV		PAD District V		United States
	East Coast	Appalachian #1	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Kans., Mo.	Okl.,	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	Dist. IV West Coast
Natural Gas Liquids	467	399	866	1,904	440	6,228	8,573	19,009	2,824	6,808	529	3,065	32,235	2,221	1,158	45,053
Natural Gasoline and Isopentane	63	33	96	80	73	1,335	1,468	1,918	1,057	1,173	133	292	4,573	343	434	6,914
Unfractionated Stream	0	34	34	873	90	-2,575	-1,611	9,943	-11,108	297	-180	1,798	750	945	105	223
Plant Condensate	0	0	0	24	20	48	92	205	425	20	17	5	672	121	0	885
Liquefied Petroleum Gases	404	332	736	947	257	7,420	8,624	6,943	12,450	5,318	559	970	26,240	812	619	37,031
Ethane	155	168	323	434	0	1,082	1,516	794	3,031	1,784	26	88	5,723	25	0	7,587
Propane	152	112	264	356	160	2,882	3,398	2,438	3,958	1,773	158	425	8,752	510	355	13,279
Butane	82	36	118	80	85	1,123	1,288	1,351	1,830	683	229	212	4,305	269	225	6,205
Butane-Propane Mixtures	0	0	0	0	0	10	10	52	38	1	13	0	104	3	29	146
Ethane-Propane Mixtures	0	0	0	26	0	1,867	1,893	2,050	2,436	496	0	168	5,150	0	0	7,043
Isobutane	15	16	31	51	12	456	519	258	1,157	581	133	77	2,206	5	10	2,771
Finished Petroleum Products	54	0	54	1	0	6	7	265	23	0	6	5	299	9	0	369
Finished Motor Gasoline	54	0	54	0	0	0	0	0	0	0	0	0	0	7	0	61
Finished Leaded Motor Gasoline	44	0	44	0	0	0	0	0	0	0	0	0	0	1	0	45
Finished Unleaded Motor Gasoline	10	0	10	0	0	0	0	0	0	0	0	0	0	6	0	16
Finished Aviation Gasoline	0	0	0	0	0	0	0	134	0	0	0	0	0	0	0	134
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	3
Special Naphthas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	0	0	0	6	7	118	0	0	0	0	118	0	0	118
Total Production	521	399	920	1,905	440	6,234	8,580	19,274	2,847	6,808	535	3,070	32,534	2,230	1,158	45,422

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, June 1983
(Thousands of Barrels, except where noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	30,432	2,773	33,205	1,603	56,530	8,164	18,569	84,866	14,753	86,428	59,701	5,732	2,454	169,068	13,297	68,177	368,613
Natural Gas Liquids																	
Natural Gasoline and Isopentane	16	0	16	0	372	57	900	1,329	1,045	1,986	498	55	81	3,665	96	260	5,366
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	122	-0	1.1	133	0	597	0	158	1	756	52	0	941
Liquefied Petroleum Gases	98	9	107	54	1,334	205	621	2,214	491	1,058	1,408	119	35	3,111	304	419	6,155
Ethane	0	0	0	0	0	0	0	0	0	0	73	0	0	73	0	0	73
Propane	0	0	0	0	37	0	0	37	0	4	53	0	0	57	10	4	108
Butane	0	9	9	17	1,113	155	501	1,786	402	958	1,102	13	0	2,475	167	227	4,664
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	5	44	111	0	9	169	72	12	253
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	98	0	98	37	184	50	120	391	84	52	69	106	26	337	55	176	1,057
Other Liquids																	
Other Hydrocarbons and Alcohol	48	0	48	0	1,396	0	0	1,396	15	201	175	0	6	397	1	354	2,196
Unfinished Oils (net)	4,178	62	4,240	10	-548	9	882	353	670	5,990	-242	190	104	6,712	-238	1,265	12,332
Motor Gasoline Blending Components (net)	278	-32	246	-12	115	-176	1,044	971	-1,100	1,180	835	-6	51	960	88	-1,639	626
Aviation Gasoline Blending Components (net)	0	0	0	0	-14	0	-9	-23	-11	14	18	0	0	21	0	6	4
Total Input to Refineries	35,050	2,812	37,862	1,655	59,307	8,259	22,018	91,239	15,863	97,454	62,393	6,248	2,732	184,690	13,600	68,842	396,233
Crude Oil Distillation																	
Gross Input (daily average)	1,046	92	1,139	53	1,956	279	626	2,915	507	2,971	2,011	200	83	5,771	457	2,323	12,606
Operable Capacity (daily average)	1,473	174	1,647	66	2,351	295	854	3,565	612	4,042	2,877	295	107	7,932	561	3,113	16,819
Operating Ratio (percent) ¹	71.1	53.0	69.1	81.0	83.2	94.6	73.4	81.8	82.9	73.5	69.9	67.7	77.2	72.8	81.6	74.6	74.9
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)91	.44	.87	.65	.88	1.69	.49	.87	.64	.82	.77	1.94	.78	.82	.91	.95	.86
API Gravity, Weighted Average	31.75	40.70	32.48	35.99	35.95	30.96	37.83	35.89	37.79	35.18	34.14	33.71	38.07	35.04	35.07	25.98	33.32
Operable Capacity (daily average)																	
Operating	1,473	174	1,647	66	2,351	295	854	3,565	612	4,042	2,877	295	107	7,932	561	3,113	16,819
Idle	1,308	110	1,418	66	2,166	295	759	3,286	592	3,359	2,297	235	107	6,580	527	2,859	14,670
Total	165	64	229	0	184	0	95	279	29	683	579	60	0	1,352	34	255	2,149

¹ Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, June 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III			Total		PAD		United	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Wisc., Dak.	Minn., Mo.	Okla., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	PAD Dist. IV Rocky Mt.	PAD Dist. V West Coast
Liquefied Refinery Gases	1,337	27	1,364	31	1,666	187	356	2,240	160	3,053	2,116	73	110	0	5,512	119	1,536
For Petrochemical Feedstock Use	421	0	421	0	225	0	48	273	32	1,388	1,053	10	0	0	2,483	-7	316
For Other Uses	916	27	943	31	1,441	187	308	1,967	128	1,665	1,063	63	110	0	3,029	126	1,220
Ethane	0	0	0	0	0	0	0	0	0	617	9	0	0	0	626	0	-1
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	292	2	0	0	0	294	0	0
For Other Uses	0	0	0	0	0	0	0	0	0	325	7	0	0	0	332	0	0
Propane	1,144	27	1,171	31	1,665	181	470	2,347	206	2,163	1,294	53	60	0	3,776	155	886
For Petrochemical Feedstock Use	358	0	358	0	225	0	48	273	32	1,025	195	0	0	0	1,252	0	180
For Other Uses	786	27	813	31	1,440	181	422	2,074	174	1,138	1,099	53	60	0	2,524	155	706
Butane	193	0	193	0	5	6	-114	-103	-48	154	809	18	35	0	968	-9	565
For Petrochemical Feedstock Use	63	0	63	0	0	0	0	0	0	59	856	10	0	0	925	0	136
For Other Uses	130	0	130	0	5	6	-114	-103	-48	95	-47	8	35	0	43	-9	429
Butane-Propane Mixtures	0	0	0	0	-4	0	0	-4	2	107	4	2	15	0	130	-20	86
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
For Other Uses	0	0	0	0	-4	0	0	-4	2	107	4	2	15	0	130	-20	86
Isobutane for Petro. Feed. Use	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	-7	5
Finished Motor Gasoline	17,930	1,146	19,076	920	36,234	4,366	13,301	54,821	8,105	46,324	30,225	1,856	1,194	0	87,704	7,156	30,574
Finished Leaded Motor Gasoline	7,127	521	7,648	420	16,617	2,279	8,295	27,611	4,282	20,653	13,713	968	753	0	40,369	4,425	13,710
Finished Unleaded Motor Gasoline	10,803	625	11,428	500	19,617	2,087	5,006	27,210	3,823	25,671	16,512	888	441	0	47,335	2,731	16,864
Finished Aviation Gasoline	33	0	33	0	46	0	72	118	6	182	113	0	0	0	301	29	293
Naphtha-Type Jet Fuel	547	47	594	31	474	103	322	930	681	1,445	437	207	410	0	3,180	355	1,408
Kerosene-Type Jet Fuel	984	0	984	7	3,060	394	564	4,025	800	5,462	5,877	3	46	0	12,191	691	6,969
Kerosene	-60	30	-30	0	42	-9	-69	-36	-2	1,173	918	4	46	0	2,139	2	111
Distillate Fuel Oil	7,117	685	7,802	350	10,614	1,835	5,159	17,958	3,484	18,691	11,372	1,707	741	0	35,995	3,599	11,009
Residual Fuel Oil	2,478	160	2,638	95	1,218	191	371	1,875	580	6,120	3,674	412	61	0	10,847	246	9,341
Naphtha < 400 Deg. For Petro. Feed. Use	339	0	339	0	280	0	94	374	501	2,654	10	39	0	0	3,204	0	118
Other Oils > 400 Deg. For Petro. Feed. Use	6	0	6	0	148	0	185	388	13	951	38	148	0	0	6,993	0	654
Special Naphthas	12	27	39	0	203	0	226	677	9	1,565	765	331	0	0	1,150	4	79
Lubricants	248	357	605	0	451	0	33	60	7	128	115	48	0	0	2,670	30	438
Waxes	18	75	93	0	27	0	33	60	7	128	115	48	0	0	298	9	62
Petroleum Coke	1,089	19	1,108	22	2,161	312	676	3,171	287	2,559	1,838	129	12	0	4,825	263	3,534
Marketable	330	0	330	0	1,099	189	461	1,749	53	1,119	1,144	108	0	0	2,424	105	2,745
Catalyst	759	19	778	22	1,062	123	215	1,422	234	1,440	694	21	12	0	2,401	158	789
Asphalt and Road Oil	2,998	45	3,043	105	2,811	847	608	4,371	602	756	1,654	1,083	100	0	4,195	772	2,482
Still Gas	1,641	113	1,754	57	2,996	288	832	4,173	461	4,546	2,331	220	57	0	7,615	513	3,906
For Petrochemical Feedstock Use	189	0	189	0	2	0	0	2	5	268	21	0	0	0	294	24	101
For Other Uses	1,452	113	1,565	57	2,994	288	832	4,171	456	4,278	2,310	220	57	0	7,321	489	3,805
Miscellaneous Products	181	43	224	3	86	25	54	168	73	461	223	50	0	0	807	24	172
Fuel Use	12	21	33	0	1	0	15	16	0	31	187	0	0	0	218	3	30
Non-Fuel Use	169	22	191	3	85	25	39	152	73	430	36	50	0	0	589	21	142
Total Production	36,898	2,774	39,672	1,621	62,517	8,539	22,785	95,462	15,311	100,122	64,503	6,310	2,780	0	189,626	13,812	72,686
Processing Gain(-) or Loss(+)¹	-1,848	38	-1,810	34	-3,210	-280	-767	-4,223	-48	-2,668	-2,110	-62	-48	0	-4,936	-212	-3,844
Total	35,050	2,812	37,862	1,655	59,307	8,259	22,018	91,239	15,263	97,454	62,393	6,248	2,732	0	184,690	13,600	68,842

¹ Represents the arithmetic difference between input and output.
Note: See Explanatory Note on negative production.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,¹ June 1983

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		PAD Dist. IV Rocky Mt.	PAD Dist. V West Coast
Finished Motor Gasoline2	50.5	41.2	49.8	54.4	58.8	52.4	55.1	57.2	49.6	44.7	45.9	25.8	39.9	44.8	50.7	44.9	48.3
Finished Aviation Gasoline3	1	0	1	0	1	0	4	2	1	2	2	0	0	2	2	4	2
Liquefied Refinery Gases	3.9	1.0	3.6	1.9	3.0	2.3	1.8	2.6	1.0	3.3	3.6	1.2	4.3	3.1	9	2.2	2.8
Naphtha-Type Jet Fuel	1.6	1.7	1.6	1.9	1.8	1.3	1.7	1.1	4.4	1.6	1.7	3.5	16.0	1.8	2.7	2.0	1.7
Kerosene-Type Jet Fuel	2.8	0	2.6	4	5.5	4.8	2.9	4.7	5.2	5.9	9.9	1	1.9	6.9	5.3	10.0	6.5
Kerosene	2	1.1	1	0	1	1	4	0	0	1.3	1.5	1	1.8	1.2	0	2	6
Distillate Fuel Oil	20.6	24.2	20.8	21.7	19.0	22.5	26.5	21.1	22.6	20.2	19.1	28.8	29.0	20.5	27.6	15.9	20.0
Residual Fuel Oil	7.2	5.6	7.0	5.9	2.2	2.3	1.9	2.2	3.8	6.6	6.2	7.0	2.4	6.2	1.9	13.5	6.5
Naphtha < 400 Deg. F. Petro. Feed. Use	1.0	0	0	0	0	0	0	0	3.2	2.9	0	0	0	0	0	2	1.1
Other Oils > 400 Deg. F. Petro. Feed. Use	0	0	0	0	0	0	0	0	0	4.4	4.7	0	0	0	0	0	2.0
Special Naphthas	0	1.0	1	0	4	0	1.0	0	1	1.0	1	2.5	0	7	0	1	4
Lubricants	7	12.6	1.6	0	8	0	1.2	8	1	1.7	1.3	5.6	0	1.5	2	6	1.2
Waxes	1	2.6	2	0	0	0	2	1	0	1	2	8	0	2	1	1	1
Petroleum Coke	3.1	7	3.0	1.4	3.9	3.8	3.5	3.7	1.9	2.8	3.1	2.2	5	2.7	2.0	5.1	3.4
Asphalt and Road Oil	8.7	1.6	8.1	6.5	5.0	10.4	3.1	5.1	3.9	8	2.8	18.3	3.9	2.4	5.9	3.6	3.9
Still Gas	4.7	4.0	4.7	3.5	5.4	3.5	4.3	4.9	3.0	4.9	3.9	3.7	2.2	4.3	3.9	5.6	4.7
Miscellaneous Products	5	1.5	6	2	2	3	3	2	5	5	4	8	0	5	2	2	4
Processing Gain(-) or Loss(+) ⁴	-5.3	1.3	-4.8	2.1	-5.7	-3.4	-3.9	-5.0	-3	-2.9	-3.5	-1.0	-1.9	-2.8	-1.6	-5.5	-3.9

¹ Based on crude oil input and net reruns of unfinished oils.² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.⁴ Represents the difference between input and production.

Note: Totals may not equal sum of components due to independent rounding.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, June 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	26,114	15,054	52,422	1,506	9,959	105,056
Natural Gas Liquids	229	3,203	930	379	520	5,261
Natural Gasoline and Isopentane	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0
Liquefied Petroleum Gases	229	3,203	930	285	520	5,167
Ethane	0	960	0	0	0	960
Propane	186	477	0	121	263	1,047
Butane	43	541	0	164	257	1,004
Butane-Propane Mixtures	(s)	0	930	0	0	930
Ethane-Propane Mixtures	0	1,225	0	0	0	1,225
Other Liquids ¹	2,167	491	5,980	147	950	9,736
Unfinished Oils ¹	1,355	228	5,784	147	356	8,470
Motor Gasoline Blending Components	212	263	197	0	594	1,266
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	29,186	1,646	3,125	112	2,403	36,473
Finished Motor Gasoline	6,281	291	0	72	1,313	7,957
Finished Leaded Motor Gasoline	2,659	240	0	71	921	3,892
Finished Unleaded Motor Gasoline	3,621	51	0	1	392	4,065
Finished Aviation Gasoline	(s)	0	0	0	0	(s)
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	596	0	0	0	122	746
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	596	0	28	0	122	746
Kerosene	7	0	0	0	0	7
Distillate Fuel Oil	4,513	600	32	31	82	5,257
Bonded Ships Bunkers	0	0	0	0	0	0
Other	4,513	600	32	31	82	5,257
Residual Fuel Oil	16,706	581	2,135	9	840	20,270
Bonded Ships Bunkers	0	0	0	0	0	0
Other	16,706	581	2,135	9	840	20,270
Naphtha < 400 Deg. for Petro. Feed. Use	33	47	362	0	0	441
Other Oils > 400 Deg. for Petro. Feed. Use	0	1	172	0	0	172
Special Naphthas	455	100	356	0	19	930
Lubricants	232	8	36	0	(s)	276
Waxes	3	4	1	0	8	16
Asphalt and Road Oil	359	9	0	0	11	378
Miscellaneous Products	2	5	5	1	8	21
Total Imports	57,697	20,395	62,457	2,144	13,832	156,525

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, June 1983
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	7,053	0	0	0	0	0	0	381	1,571	0	0	1,953	9,006	300
Saudi Arabia	4,704	0	0	0	0	0	0	0	528	0	15	544	5,248	175
United Arab Emirates	735	0	236	0	0	0	0	0	0	229	0	485	1,200	40
Subtotal Arab OPEC	12,492	0	236	0	0	0	0	381	2,100	229	15	2,961	15,453	515
Other OPEC														
Ecuador	2,092	0	0	0	0	0	0	0	310	0	0	310	2,402	80
Gabon	1,982	0	0	0	0	0	0	0	0	0	0	0	1,982	66
Indonesia	13,509	0	0	0	184	56	0	39	1,267	0	0	1,545	15,054	502
Iran	1,152	0	0	0	0	0	0	0	0	0	0	0	1,152	38
Nigeria	12,048	0	0	0	0	0	0	0	0	0	0	0	12,048	402
Venezuela	3,791	0	352	0	1,102	0	0	1,292	3,516	0	0	6,262	10,053	335
Subtotal Other OPEC	34,574	0	352	0	1,286	56	0	1,331	5,093	0	0	8,118	42,692	1,423
Other														
Angola	2,253	0	0	0	0	0	0	0	316	0	0	316	2,568	86
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	2,282	170	0	158	0	31	930	0	528	4,098	4,098	137
Bolivia	247	0	0	0	0	0	0	0	0	0	0	0	247	8
Brazil	226	0	0	0	0	0	0	0	343	36	0	380	606	20
Brunei	(s)	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	8,568	4,236	375	275	974	16	7	1,421	910	165	318	8,697	17,265	576
Egypt	946	0	0	0	0	0	0	0	0	0	0	0	946	32
France	0	0	0	0	0	0	0	(s)	0	0	(s)	0	0	0
Malaysia	0	0	0	0	0	0	0	0	4	0	0	4	4	0
Mexico	23,595	930	0	(s)	0	28	0	24	321	1	18	1,322	24,917	831
Netherlands	0	0	0	58	1,514	75	0	512	0	94	25	2,279	2,279	76
Netherlands Antilles	0	0	1,183	0	245	0	0	229	3,508	0	261	5,426	5,426	181
Norway	2,097	0	0	0	0	0	0	0	0	0	0	0	2,097	70
People's Republic of China	0	0	120	444	314	0	0	0	642	0	0	879	1,459	49
Peru	386	0	430	0	0	0	0	0	0	0	0	1,072	1,433	48
Puerto Rico	0	0	441	0	354	0	0	114	0	323	201	1,433	1,433	48
Romania	0	0	0	0	525	0	0	0	0	0	0	525	525	18
Spain	160	0	0	0	0	0	0	0	0	0	0	0	160	5
Trinidad and Tobago	2,781	0	0	0	0	0	0	0	821	0	0	821	3,601	120
United Kingdom	12,281	1	0	0	75	0	0	0	361	2	1	439	12,720	424
Virgin Islands	0	0	1,905	0	1,754	363	0	1,179	2,358	0	0	7,559	7,559	252
Zaire	905	0	0	0	0	0	0	0	0	0	0	0	905	30
Other Western Hemisphere	290	0	(s)	0	98	0	0	15	1,410	76	4	1,604	1,894	63
Other Eastern Hemisphere	3,256	(s)	1,145	319	817	50	0	19	1,155	4	27	3,535	6,791	226
Subtotal Other	57,990	5,167	7,882	1,266	6,671	691	7	3,544	13,078	701	1,384	40,390	98,380	3,279
Total Imports	105,056	5,167	8,470	1,266	7,957	746	7	5,257	20,270	930	1,399	51,469	156,525	5,218

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, June 1983
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	3,674	0	0	0	0	0	0	381	1,571	0	0	1,953	5,627	188
Saudi Arabia	1,145	0	0	0	0	0	0	0	0	0	0	0	1,145	38
United Arab Emirates	287	0	0	0	0	0	0	0	0	229	0	229	516	17
Subtotal Arab OPEC	5,107	0	0	0	0	0	0	381	1,571	229	0	2,182	7,288	243
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	310	0	0	310	310	10
Gabon	205	0	0	0	0	0	0	0	0	0	0	0	205	7
Indonesia	2,895	0	0	0	0	0	0	0	481	0	0	481	3,376	113
Iran	561	0	0	0	0	0	0	0	0	0	0	0	561	19
Nigeria	951	0	0	0	0	0	0	0	0	0	0	0	951	32
Venezuela	2,299	0	0	0	970	0	0	0	0	0	0	0	7,700	257
Subtotal Other OPEC	6,910	0	0	0	970	0	0	1,292	3,139	0	0	5,401	13,103	437
Other														
Angola	1,297	0	0	0	0	0	0	0	316	0	0	316	1,613	54
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
Bahamas	0	0	0	0	0	0	0	0	0	0	(s)	0	0	7
Brazil	226	0	0	0	0	158	0	31	929	0	0	1,118	1,118	37
Canada	425	229	0	0	0	0	0	0	343	0	0	343	570	19
Egypt	946	0	0	0	351	0	7	774	319	46	141	1,867	2,291	76
France	0	0	0	0	0	0	0	0	0	0	0	0	946	32
Mexico	3,092	0	0	0	0	0	0	(s)	0	0	0	0	0	(s)
Netherlands	0	0	0	0	0	0	0	0	302	0	0	302	3,394	113
Netherlands Antilles	0	0	954	43	1,514	75	0	512	0	0	25	2,170	2,170	72
Norway	1,590	0	0	0	0	0	0	229	3,508	0	261	4,952	4,952	165
Peru	0	0	0	0	0	0	0	0	0	0	0	0	1,590	53
Puerto Rico	0	0	441	0	354	0	0	114	422	140	201	1,250	1,250	42
Romania	0	0	0	0	525	0	0	0	0	0	0	525	525	18
Spain	160	0	0	0	0	0	0	0	0	0	0	0	160	5
Trinidad and Tobago	486	0	0	0	0	0	0	0	821	0	0	821	1,306	44
United Kingdom	4,037	0	0	0	75	0	0	0	361	2	(s)	438	4,475	149
Virgin Islands	0	0	560	0	1,754	363	0	1,179	2,358	0	0	6,214	6,214	207
Zaire	187	0	0	0	0	0	0	0	0	0	0	0	187	6
Other Western Hemisphere														
Other Eastern Hemisphere	1,652	(s)	0	169	737	0	0	0	1,187	38	0	1,225	1,225	41
Subtotal Other	14,098	229	1,955	212	5,310	596	7	2,839	11,204	(s)	629	23,208	37,306	97
Total Imports	26,114	229	1,955	212	6,281	596	7	4,513	16,706	455	629	31,582	57,697	1,923
PAD District II														
Arab OPEC														
Algeria	1,020	0	0	0	0	0	0	0	0	0	0	0	1,020	34
Subtotal Arab OPEC	1,020	0	0	0	0	0	0	0	0	0	0	0	1,020	34

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, June 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District II														
Other OPEC														
Iran	590	0	0	0	0	0	0	0	0	0	0	0	590	20
Nigeria	1,025	0	0	0	0	0	0	0	0	0	0	0	1,025	34
Subtotal Other OPEC	1,615	0	0	0	0	0	0	0	0	0	0	0	1,615	54
Other														
Canada	6,031	3,202	228	263	291	0	0	600	581	100	74	5,339	11,370	379
France	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Mexico	3,932	0	0	0	0	0	0	0	0	0	0	0	3,932	131
Norway	507	0	0	0	0	0	0	0	0	0	0	0	507	17
Trinidad and Tobago	451	0	0	0	0	0	0	0	0	0	0	0	451	15
United Kingdom	1,014	1	0	0	0	0	0	0	0	0	(s)	1	1,015	34
Other Western Hemisphere	140	0	0	0	0	0	0	0	0	0	0	0	140	5
Other Eastern Hemisphere	345	(s)	0	0	0	0	0	0	0	0	0	(s)	345	12
Subtotal Other	12,420	3,203	228	263	291	0	0	600	581	100	74	5,340	17,760	592
Total Imports	15,054	3,203	228	263	291	0	0	600	581	100	74	5,340	20,395	660
PAD District III														
Arab OPEC														
Algeria	2,359	0	0	0	0	0	0	0	0	0	0	0	2,359	79
Saudi Arabia	3,559	0	0	0	0	0	0	0	528	0	15	544	4,102	137
United Arab Emirates	448	0	0	0	0	0	0	0	0	0	0	0	448	15
Subtotal Arab OPEC	6,366	0	0	0	0	0	0	0	528	0	15	544	6,910	230
Other OPEC														
Ecuador	1,730	0	0	0	0	0	0	0	0	0	0	0	1,730	58
Gabon	1,777	0	0	0	0	0	0	0	0	0	0	0	1,777	59
Indonesia	1,623	0	0	0	0	0	0	0	365	0	0	365	1,988	66
Iran	1	0	0	0	0	0	0	0	0	0	0	0	1	(s)
Nigeria	10,072	0	0	0	0	0	0	0	0	0	0	0	10,072	336
Venezuela	1,492	0	352	0	0	0	0	0	378	0	0	730	2,222	74
Subtotal Other OPEC	16,695	0	352	0	0	0	0	0	743	0	0	1,095	17,790	593
Other														
Angola	955	0	0	0	0	0	0	0	0	0	0	0	955	32
Bahamas	0	0	2,282	170	0	0	0	0	1	0	528	2,981	2,981	99
Bolivia	247	0	0	0	0	0	0	0	0	0	0	0	247	8
Brazil	0	0	0	0	0	0	0	0	0	36	0	36	36	1
Brunei	(s)	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
Canada	(s)	0	0	11	0	0	0	2	0	0	0	13	(s)	(s)
France	0	0	0	(s)	0	0	0	15	19	0	(s)	(s)	(s)	(s)
Mexico	16,570	930	0	0	0	28	0	0	0	1	1	994	17,565	585
Netherlands	0	0	0	15	0	0	0	0	0	94	(s)	109	109	4
Netherlands Antilles	0	0	230	0	0	0	0	0	0	0	0	230	230	8
Peru	386	0	430	0	0	0	0	0	220	0	0	650	1,037	35
Puerto Rico	0	0	0	0	0	0	0	0	0	183	0	183	183	6

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, June 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unlin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other														
Trinidad and Tobago	1,844	0	0	0	0	0	0	0	0	0	0	0	1,844	61
United Kingdom	7,230	0	0	0	0	0	0	0	0	0	0	0	7,230	241
Virgin Islands	0	0	1,345	0	0	0	0	0	0	0	0	0	1,345	45
Zaire	718	0	0	0	0	0	0	0	0	0	0	0	718	24
Other Western Hemisphere	150	0	0	0	0	0	0	0	0	0	0	0	150	14
Other Eastern Hemisphere	1,258	0	1,145	0	0	0	0	15	223	38	4	280	431	94
Subtotal Other	29,360	930	5,431	197	0	28	0	32	864	356	559	8,397	37,757	1,259
Total Imports	52,422	930	5,784	197	0	28	0	32	2,135	356	575	10,035	62,457	2,082
PAD District IV														
Other														
Canada	1,506	285	147	0	72	0	0	31	9	0	94	638	2,144	71
Subtotal Other	1,506	285	147	0	72	0	0	31	9	0	94	638	2,144	71
Total Imports	1,506	285	147	0	72	0	0	31	9	0	94	638	2,144	71
PAD District V														
Arab OPEC														
United Arab Emirates	0	0	236	0	0	0	0	0	0	0	0	236	236	8
Subtotal Arab OPEC	0	0	236	0	0	0	0	0	0	0	0	236	236	8
Other OPEC														
Ecuador	362	0	0	0	0	0	0	0	0	0	0	0	362	12
Indonesia	8,991	0	0	0	184	56	0	39	421	0	0	700	9,691	323
Venezuela	0	0	0	0	131	0	0	0	0	0	0	131	131	4
Subtotal Other OPEC	9,353	0	0	0	315	56	0	39	421	0	0	831	10,184	339
Other														
Canada	606	520	0	0	261	16	0	16	0	19	9	840	1,446	48
Malaysia	0	0	0	0	0	0	0	0	4	0	0	4	4	(s)
Mexico	0	0	0	0	0	0	0	9	0	0	17	26	26	1
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	0	0	0	0	245	0	0	0	0	0	0	245	245	8
Other Western Hemisphere	0	0	120	444	314	0	0	0	0	0	0	879	879	29
Other Eastern Hemisphere	0	0	0	0	98	0	0	0	0	0	0	98	98	3
Subtotal Other	606	520	120	594	80	50	0	19	415	0	1	714	714	24
Total Imports	9,959	520	356	594	1,313	122	0	82	840	19	27	3,873	13,832	461

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports of Crude Oil and Petroleum Products by PAD District, June 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	780	0	0	3,526	4,306
Liquefied Petroleum Gases	65	391	1,204	0	99	1,759
Ethane	0	(s)	(s)	0	0	(s)
Propane	27	157	539	0	40	762
Butane	38	234	665	0	59	997
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	1	0	627	0	19	647
Naphtha-Type Jet Fuel	0	0	(s)	0	0	(s)
Kerosene-Type Jet Fuel	0	0	0	0	21	21
Kerosene	1	0	57	0	0	58
Distillate Fuel Oil	(s)	1	923	0	279	1,203
Residual Fuel Oil	(s)	0	2,541	0	4,014	6,555
Naphtha < 400 Deg. for Petrochem. Feedstock	45	6	31	(s)	4	86
Other Oils > 400 Deg. for Petrochem. Feedstock	(s)	48	329	0	164	541
Special Naphthas	4	5	25	0	3	37
Lubricants	91	18	343	2	48	502
Waxes	5	(s)	7	0	4	15
Petroleum Coke	246	293	4,150	0	2,743	7,432
Asphalt	27	2	(s)	1	1	32
Miscellaneous Products	12	1	11	(s)	4	28
Total Product Exports	498	765	10,247	3	7,402	18,914
Total Exports	498	1,546	10,247	3	10,928	23,221

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with that of

Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, June 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	(s)	0	0	0	0	(s)	4	(s)	33	0	(s)	38	1
Australia	0	5	(s)	0	0	313	(s)	12	(s)	242	0	2	574	19
Bahamas	0	3	1	0	100	(s)	(s)	2	0	0	0	(s)	106	4
Bahrain	0	0	0	0	0	0	(s)	1	0	64	0	(s)	65	2
Belgium & Luxembourg	0	1	0	0	0	0	(s)	2	(s)	743	(s)	1	747	25
Brazil	0	2	0	0	201	68	1	3	0	0	0	(s)	275	9
Cameroon	0	0	0	0	0	0	0	(s)	0	30	0	0	30	1
Canada	780	420	16	0	12	229	6	66	2	343	4	71	1,950	65
Chile	0	(s)	0	0	(s)	0	(s)	2	(s)	0	0	2	4	(s)
China (Taiwan)	0	0	0	0	0	0	0	12	(s)	0	0	1	12	(s)
Colombia	0	(s)	0	0	0	0	0	16	0	0	0	1	17	1
Costa Rica	0	24	0	0	0	0	1	2	(s)	0	0	1	29	1
Denmark	0	(s)	0	0	0	0	0	(s)	(s)	91	0	(s)	92	3
Dominican Republic	0	70	0	0	0	0	0	1	(s)	0	27	(s)	98	3
Ecuador	0	34	489	0	434	0	(s)	1	(s)	0	0	(s)	958	32
Egypt	0	6	0	0	0	0	(s)	1	(s)	0	0	(s)	7	(s)
El Salvador	0	(s)	0	0	0	0	(s)	2	0	0	0	(s)	3	(s)
Finland	0	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)
France	0	0	0	0	0	0	0	1	1	844	0	203	1,049	35
French Pacific Isl	0	0	0	0	44	279	0	(s)	0	0	(s)	0	322	11
Ghana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece	0	(s)	0	0	0	0	0	2	0	0	0	(s)	3	(s)
Guatemala	0	50	0	0	0	0	0	3	(s)	0	0	(s)	54	2
Guinea	0	0	0	0	0	0	0	1	0	0	0	0	1	(s)
Honduras	0	0	0	0	0	0	0	3	(s)	0	0	1	4	(s)
Hong Kong	0	1	0	0	0	0	(s)	3	(s)	0	0	1	2	(s)
India	0	0	0	0	0	0	(s)	1	(s)	0	0	(s)	6	(s)
Indonesia	0	0	0	0	0	0	0	(s)	(s)	0	0	1	3	(s)
Iran	0	(s)	0	0	0	0	(s)	1	0	0	0	0	(s)	(s)
Israel	0	0	0	0	0	0	0	0	0	0	0	0	1	(s)
Italy	0	1	0	0	0	0	0	(s)	0	(s)	0	(s)	1,109	37
Ivory Coast	0	0	0	0	0	0	4	(s)	0	1,019	0	84	239	8
Jamaica	0	4	0	0	0	239	0	(s)	0	0	0	0	31	1
Japan	0	(s)	(s)	0	26	776	0	13	(s)	1,825	(s)	17	2,660	89
Jordan	0	1	0	0	0	0	(s)	2	0	0	(s)	0	2	(s)
Korea, Republic of	0	1	0	0	0	653	(s)	2	(s)	55	(s)	1	712	24
Kuwait	0	0	0	0	0	0	(s)	2	0	0	0	(s)	2	(s)
Lebanon	0	(s)	0	0	0	0	0	1	0	0	0	(s)	2	(s)
Liberia	0	0	0	0	0	135	0	(s)	0	0	0	0	135	5
Malaysia	0	(s)	0	0	0	0	0	2	(s)	16	0	0	19	1
Mexico	0	838	2	21	(s)	0	9	181	4	26	0	4	1,086	36
Netherlands	0	1	0	0	0	0	6	1	(s)	1,022	(s)	56	1,087	36
Netherlands Antilles	0	0	0	0	197	337	(s)	(s)	0	0	0	(s)	535	18
New Zealand	0	0	0	0	0	0	(s)	3	(s)	75	0	(s)	78	3
Nicaragua	0	(s)	0	0	0	0	3	1	0	0	0	0	5	(s)
Nigeria	0	0	0	0	0	0	0	3	0	0	0	0	3	(s)
Norway	0	0	0	0	0	0	0	0	0	119	0	0	120	4
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Panama	0	33	0	0	0	419	(s)	2	(s)	0	0	4	459	15
Peru	0	59	138	0	0	0	0	1	(s)	0	0	57	254	8
Philippines	0	0	0	0	0	155	(s)	1	(s)	0	0	65	221	7
Puerto Rico	1,698	32	(s)	0	0	(s)	(s)	11	(s)	1	0	9	1,751	58
Rep. of South Africa	0	(s)	0	0	0	0	(s)	13	(s)	94	(s)	1	108	4

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, June 1983
(Thousands of Barrels)
(continued)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Saudi Arabia	0	1	0	0	0	0	0	18	(s)	4	0	3	25	1
Singapore	0	2	0	0	0	1,522	(s)	1	(s)	0	(s)	1	1,525	51
Spain	0	37	0	0	0	13	0	4	(s)	510	0	1	565	19
Surinam	0	0	0	0	0	0	(s)	(s)	0	10	0	(s)	10	(s)
Sweden	0	(s)	0	0	0	0	0	1	(s)	0	0	1	3	(s)
Switzerland	0	1	0	0	0	0	(s)	1	(s)	58	0	3	62	2
Thailand	0	0	0	0	0	0	0	12	(s)	0	0	100	112	4
Trinidad and Tobago	0	0	0	0	0	0	0	4	0	1	0	(s)	5	(s)
Turkey	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
United Arab Emirates	0	(s)	0	0	0	0	(s)	1	0	0	(s)	(s)	1	(s)
United Kingdom	0	1	0	0	189	0	0	1	(s)	(s)	(s)	3	194	6
U.S.S.R.	0	0	0	0	0	0	0	36	0	78	0	5	119	4
Uruguay	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Venezuela	0	0	0	0	0	0	0	1	(s)	47	(s)	(s)	48	2
Virgin Islands	1,257	86	0	0	0	634	0	(s)	0	0	0	0	1,977	66
West Germany	0	1	0	0	0	0	4	2	1	0	(s)	(s)	7	(s)
Yugoslavia	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Other	571	42	0	(s)	1	782	0	16	(s)	83	(s)	2	1,497	50
Total	4,306	1,759	647	21	1,203	6,555	37	502	15	7,432	32	712	23,221	774

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with that of Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, June 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		PAD Dist. IV	
																Rocky Mtn.	West Coast
Crude Oil (incl. lease condensate)																	
Refinery	—	—	15,072	—	—	—	—	13,817	—	—	—	—	—	49,135	2,410	25,202	105,636
Tank Farms and Pipelines	—	—	956	—	—	—	—	62,964	—	—	—	—	—	90,059	11,009	32,871	197,859
Leases	—	—	56	—	—	—	—	1,649	—	—	—	—	—	17,128	1,393	1,712	21,938
Strategic Petroleum Reserve ¹	—	—	0	—	—	—	—	0	—	—	—	—	—	332,484	0	0	332,484
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	28,416	28,416
Total	—	—	16,084	—	—	—	—	78,430	—	—	—	—	—	488,806	14,812	88,201	686,333
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	37,336	3,062	40,398	1,076	41,379	6,162	15,711	64,328	8,988	80,763	43,578	4,249	1,451	139,029	13,536	62,894	320,185
Bulk Terminal	—	—	99,922	—	—	—	—	85,618	—	—	—	—	—	82,889	2,171	21,137	291,737
Pipeline	—	—	27,231	—	—	—	—	32,615	—	—	—	—	—	38,078	2,612	3,952	104,488
Natural Gas Processing Plant	118	39	157	0	214	52	1,157	1,423	1,801	1,806	766	77	155	4,605	218	112	6,515
Total	—	—	167,708	—	—	—	—	183,984	—	—	—	—	—	264,601	18,537	88,095	722,925
Natural Gasoline and Isopentane																	
Refinery	18	0	18	0	33	18	138	189	81	574	135	1	14	805	5	31	1,048
Bulk Terminal	—	—	17	—	—	—	—	1,235	—	—	—	—	—	2,125	1	0	3,378
Pipeline	—	—	0	—	—	—	—	505	—	—	—	—	—	888	17	5	1,415
Natural Gas Processing Plant	5	8	13	0	10	18	153	181	340	168	185	17	15	725	32	20	971
Total	—	—	48	—	—	—	—	2,110	—	—	—	—	—	4,543	55	56	6,812
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	955	—	—	—	—	—	1,270	0	0	2,225
Pipeline	—	—	0	—	—	—	—	103	—	—	—	—	—	2,237	466	0	2,806
Natural Gas Processing Plant	0	1	1	0	103	2	545	650	131	1,462	90	0	10	1,693	32	0	2,376
Total	—	—	1	—	—	—	—	1,708	—	—	—	—	—	5,200	498	0	7,407
Plant Condensate																	
Refinery	0	0	0	0	5	0	0	5	4	69	0	53	0	126	0	0	131
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	1	0	0	1
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	207	0	0	207
Natural Gas Processing Plant	0	0	0	0	1	4	2	7	30	25	5	10	0	70	24	0	101
Total	—	—	0	—	—	—	—	12	—	—	—	—	—	404	24	0	440
Liquefied Petroleum Gases																	
Refinery	447	23	470	257	1,530	115	596	2,498	176	4,677	2,163	25	22	7,063	291	594	10,916
Bulk Terminal	—	—	1,426	—	—	—	—	26,018	—	—	—	—	—	50,761	57	1,347	79,609
Pipeline	—	—	2,846	—	—	—	—	6,644	—	—	—	—	—	3,214	46	0	12,750
Natural Gas Processing Plant	98	30	128	0	99	28	457	584	1,105	148	486	49	129	1,917	123	92	2,844
Total	—	—	4,870	—	—	—	—	35,744	—	—	—	—	—	62,955	517	2,033	106,119
Ethane																	
Refinery	0	0	0	0	7	0	0	7	0	1,124	0	0	0	1,124	0	0	1,131
Bulk Terminal	—	—	0	—	—	—	—	951	—	—	—	—	—	2,269	0	0	3,220
Pipeline	—	—	0	—	—	—	—	1,258	—	—	—	—	—	274	0	0	1,532

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, June 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mts.	ML	
Ethane																	
Natural Gas Processing Plant	0	0	0	0	23	0	18	41	1	1	0	0	5	7	1	0	49
Total	—	—	0	—	—	—	—	2,257	—	—	—	—	—	3,674	1	0	5,932
Propane for Petrochemical Feedstock Use																	
Refinery	14	0	14	0	117	0	0	117	1	7	86	0	0	94	0	0	225
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	14	—	—	—	—	117	—	—	—	—	—	94	0	0	225
Propane For Other Uses																	
Refinery	371	7	378	1	1,030	22	201	1,254	34	1,292	897	3	4	2,230	119	109	4,090
Bulk Terminal	—	—	1,293	—	—	—	—	16,220	—	—	—	—	—	23,078	56	464	41,111
Pipeline	—	—	2,729	—	—	—	—	3,349	—	—	—	—	—	1,212	11	0	7,301
Natural Gas Processing Plant	55	30	85	0	52	18	192	262	468	31	346	21	88	954	83	70	1,454
Total	—	—	4,485	—	—	—	—	21,085	—	—	—	—	—	27,474	269	643	53,956
Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	4	0	4	0	19	0	1	0	20	0	2	26
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	4	—	—	—	—	—	20	0	2	26
Butane For Other Uses																	
Refinery	62	16	78	188	210	68	245	711	46	1,367	587	3	12	2,015	133	281	3,218
Bulk Terminal	—	—	133	—	—	—	—	3,238	—	—	—	—	—	10,977	0	640	14,988
Pipeline	—	—	117	—	—	—	—	933	—	—	—	—	—	375	0	0	1,425
Natural Gas Processing Plant	42	0	42	0	17	8	198	223	315	55	97	22	29	518	35	15	833
Total	—	—	370	—	—	—	—	5,105	—	—	—	—	—	13,885	168	936	20,464
Butane-Propane Mixtures For Petro. Feed Use																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Butane-Propane Mixtures For Other Uses																	
Refinery	0	0	0	0	3	0	0	3	1	14	8	0	2	25	4	167	199
Bulk Terminal	—	—	0	—	—	—	—	227	—	—	—	—	—	61	0	94	382
Pipeline	—	—	0	—	—	—	—	57	—	—	—	—	—	601	0	0	658
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	4	4	0	1	0	9	2	5	17
Total	—	—	0	—	—	—	—	288	—	—	—	—	—	696	6	266	1,256

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, June 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	PAD		
															Rocky Mt.		Dist. V
Ethane-Propane Mixtures																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	3,809	—	—	—	—	—	8,194	0	0	12,003
Pipeline	—	—	0	—	—	—	—	566	—	—	—	—	—	648	35	0	1,249
Natural Gas Processing Plant	0	0	0	0	0	0	29	29	252	0	0	0	2	254	0	0	283
Total	—	—	0	—	—	—	—	4,404	—	—	—	—	—	9,096	35	0	13,535
Isobutane																	
Refinery	0	0	0	68	163	21	150	402	94	854	585	18	4	1,555	35	35	2,027
Bulk Terminal	—	—	0	—	—	—	—	1,573	—	—	—	—	—	6,182	1	149	7,905
Pipeline	—	—	0	—	—	—	—	481	—	—	—	—	—	104	0	0	585
Natural Gas Processing Plant	1	0	1	0	7	2	19	28	65	57	43	5	5	175	2	2	208
Total	—	—	1	—	—	—	—	2,484	—	—	—	—	—	8,016	38	186	10,725
Other Hydrocarbons and Alcohol																	
Refinery	36	0	36	0	117	0	0	117	1	97	2	0	0	100	1	6	260
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	36	—	—	—	—	117	—	—	—	—	—	100	1	6	260
Unfinished Oils																	
Refinery	2,905	272	3,177	40	2,703	161	1,457	4,371	617	8,180	5,639	135	101	14,672	489	4,601	27,310
Naphthas and Lighter	1,671	30	1,701	0	2,426	4	1,259	3,689	516	6,161	1,371	28	42	8,118	662	3,530	17,700
Kerosene and Lighter Gas Oils	6,026	190	6,216	108	3,832	216	1,095	5,251	957	11,181	6,362	176	115	18,791	1,041	12,059	43,358
Heavy Gas Oils	1,893	333	2,226	0	3,557	36	1,124	4,717	567	5,663	2,655	38	0	8,923	668	5,216	21,750
Residuum	12,495	825	13,320	148	12,518	417	4,945	18,028	2,657	31,185	16,027	377	258	50,504	2,860	25,406	110,118
Total	4,265	150	4,415	35	5,496	679	1,582	7,792	1,459	8,458	6,399	128	125	16,569	2,046	8,116	38,938
Refinery	—	—	100	—	—	—	—	273	—	—	—	—	—	162	1	224	760
Bulk Terminal	—	—	0	—	—	—	—	194	—	—	—	—	—	27	0	0	221
Pipeline	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	4,515	—	—	—	—	8,259	—	—	—	—	—	16,758	2,047	8,340	39,919
Motor Gasoline Blending Components																	
Refinery	0	0	0	0	167	0	51	218	65	20	110	0	0	195	0	54	467
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	218	—	—	—	—	—	195	0	54	467
Aviation Gasoline Blending Components																	
Refinery	4,507	223	4,730	98	6,101	1,154	3,016	10,369	1,556	9,588	4,728	625	214	16,711	2,334	6,690	40,834
Bulk Terminal	—	—	36,770	—	—	—	—	29,119	—	—	—	—	—	12,984	1,206	9,612	89,691
Pipeline	—	—	15,250	—	—	—	—	15,952	—	—	—	—	—	18,200	1,118	2,251	52,771

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, June 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mtn.	Dist. V	
Total Finished Motor Gasoline																	
Natural Gas Processing Plant	15	0	15	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Total	—	—	56,765	—	—	—	—	55,440	—	—	—	—	—	—	47,895	4,664	183,317
Finished Leaded Motor Gasoline																	
Refinery	2,023	113	2,136	53	2,817	776	1,840	5,486	815	4,819	2,169	400	156	8,359	1,378	2,889	20,248
Bulk Terminal	—	—	18,600	—	—	—	—	14,987	—	—	—	—	—	6,808	802	4,867	46,064
Pipeline	—	—	9,236	—	—	—	—	8,946	—	—	—	—	—	8,953	779	1,161	29,075
Natural Gas Processing Plant	10	0	10	0	0	0	0	0	0	0	0	0	0	0	5	0	15
Total	—	—	29,982	—	—	—	—	29,419	—	—	—	—	—	24,120	2,964	8,917	95,402
Finished Unleaded Motor Gasoline																	
Refinery	2,484	110	2,594	45	3,284	378	1,176	4,883	741	4,769	2,559	225	58	8,352	956	3,801	20,586
Bulk Terminal	—	—	18,170	—	—	—	—	14,132	—	—	—	—	—	6,176	404	4,745	43,627
Pipeline	—	—	6,014	—	—	—	—	7,006	—	—	—	—	—	9,247	339	1,090	23,696
Natural Gas Processing Plant	5	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	6
Total	—	—	26,783	—	—	—	—	26,021	—	—	—	—	—	23,775	1,700	9,636	87,915
Finished Aviation Gasoline																	
Refinery	54	0	54	0	94	0	30	124	25	318	141	0	0	484	35	218	915
Bulk Terminal	—	—	550	—	—	—	—	321	—	—	—	—	—	94	19	370	1,354
Pipeline	—	—	0	—	—	—	—	130	—	—	—	—	—	45	0	0	175
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	34	0	0	0	0	34	0	0	34
Total	—	—	604	—	—	—	—	575	—	—	—	—	—	657	54	588	2,478
Naphtha-Type Jet Fuel																	
Refinery	244	26	270	0	547	62	216	825	255	1,013	432	178	128	2,006	226	965	4,292
Bulk Terminal	—	—	16	—	—	—	—	590	—	—	—	—	—	229	3	461	1,299
Pipeline	—	—	150	—	—	—	—	224	—	—	—	—	—	490	138	313	1,315
Total	—	—	436	—	—	—	—	1,639	—	—	—	—	—	2,725	367	1,739	6,906
Kerosene-Type Jet Fuel																	
Refinery	1,130	0	1,130	31	1,619	46	134	1,830	342	2,955	2,082	9	48	5,436	337	2,998	11,731
Bulk Terminal	—	—	4,325	—	—	—	—	4,445	—	—	—	—	—	2,079	218	1,876	12,943
Pipeline	—	—	2,852	—	—	—	—	2,173	—	—	—	—	—	4,209	199	267	9,700
Total	—	—	8,307	—	—	—	—	8,448	—	—	—	—	—	11,724	754	5,141	34,374
Kerosene																	
Refinery	437	81	518	0	419	29	156	604	29	769	427	11	98	1,334	4	282	2,742
Bulk Terminal	—	—	2,859	—	—	—	—	1,021	—	—	—	—	—	631	23	87	4,621
Pipeline	—	—	184	—	—	—	—	167	—	—	—	—	—	331	0	0	682
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	0	3
Total	—	—	3,561	—	—	—	—	1,792	—	—	—	—	—	2,299	27	369	8,048
Distillate Fuel Oils																	
Refinery	6,301	361	6,662	50	4,853	1,061	2,441	8,405	973	8,873	4,990	758	231	15,825	1,600	5,015	37,507
Bulk Terminal	—	—	28,520	—	—	—	—	14,659	—	—	—	—	—	6,277	573	4,465	54,494
Pipeline	—	—	5,949	—	—	—	—	6,499	—	—	—	—	—	7,626	628	1,102	21,804

See footnotes at end of table.

le 20. Stocks of Crude Oil and Petroleum Products By PAD District, June 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.		West Coast
Distillate Fuel Oils																	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	41,131	—	—	—	—	29,563	—	—	—	—	—	29,728	2,801	10,582	113,805
Residual Fuel Oils																	
Refinery	3,804	136	3,940	64	1,849	143	147	2,203	203	4,638	2,733	167	68	7,809	437	6,687	21,076
Bulk Terminal	—	—	20,028	—	—	—	—	1,538	—	—	—	—	—	5,311	0	1,705	28,582
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	413	0	14	427
Total	—	—	23,968	—	—	—	—	3,741	—	—	—	—	—	13,533	437	8,406	50,085
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	29	0	29	0	163	0	65	228	142	721	466	33	0	1,362	0	250	1,869
Total	29	0	29	0	163	0	65	228	142	721	466	33	0	1,362	0	250	1,869
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	4	0	4	0	26	0	1	27	242	1,179	236	0	0	1,657	3	406	2,097
Total	4	0	4	0	26	0	1	27	242	1,179	236	0	0	1,657	3	406	2,097
Special Naphthas																	
Refinery	26	41	67	0	148	0	166	314	22	1,083	61	140	0	1,306	15	284	1,986
Bulk Terminal	—	—	676	—	—	—	—	414	—	—	—	—	—	14	0	46	1,150
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	111	0	0	0	0	111	0	0	111
Total	—	—	743	—	—	—	—	728	—	—	—	—	—	1,431	15	330	3,247
Lubricants																	
Refinery	845	934	1,779	0	701	0	216	917	43	3,498	874	567	0	4,982	70	581	8,329
Bulk Terminal	—	—	1,330	—	—	—	—	1,138	—	—	—	—	—	326	2	609	3,405
Total	—	—	3,109	—	—	—	—	2,055	—	—	—	—	—	5,308	72	1,190	11,734
Waxes																	
Refinery	19	143	162	0	52	0	40	92	26	215	136	102	0	479	4	78	815
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	162	—	—	—	—	92	—	—	—	—	—	479	4	78	815
Petroleum Coke																	
Refinery	767	0	767	0	776	221	601	1,598	7	45	602	143	0	797	952	2,035	6,149
Total	767	0	767	0	776	221	601	1,598	7	45	602	143	0	797	952	2,035	6,149
Asphalt and Road Oil																	
Refinery	1,682	85	1,767	392	4,107	2,208	1,160	7,867	642	557	774	889	245	3,107	2,316	2,024	17,081
Bulk Terminal	—	—	3,273	—	—	—	—	3,840	—	—	—	—	—	524	68	285	7,990
Total	—	—	5,040	—	—	—	—	11,707	—	—	—	—	—	3,631	2,384	2,309	25,071
Miscellaneous Products																	
Refinery	226	34	260	1	58	9	10	78	38	231	60	43	0	372	0	174	884
Bulk Terminal	—	—	32	—	—	—	—	52	—	—	—	—	—	101	0	50	235
Pipeline	—	—	0	—	—	—	—	24	—	—	—	—	—	191	0	0	215
Natural Gas Processing Plant	0	0	0	0	1	0	0	1	48	3	0	1	0	52	1	0	54
Total	—	—	292	—	—	—	—	155	—	—	—	—	—	716	1	224	1,388
Total Stocks, All Oils																	
	—	—	183,792	—	—	—	—	262,414	—	—	—	—	—	753,407	33,349	176,296	1,409,258

1 Includes 33,879 thousands of barrels of domestic crude oil.
Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, June 1983
(Thousands of Barrels)

Commodity	From I to					From II to					From III to					From IV to					From V to			
	II	III	V	I		I	III	IV	V		I	II	IV	V		II	III	V	I	II	III	IV		
Crude Oil (Tanker and Barge only)	0	0	0	0	0	0	0	0	0	0	423	1,658	0	0	0	0	0	0	0	0	0	0	0	
Petroleum Products	8,380	289	0	2,399	5,520	1,968	295	77,779	27,819	1,497	362	1,177	0	0	0	0	0	0	0	0	0	0	0	
Natural Gasoline and Isopentane	0	0	0	0	129	0	0	0	607	5	0	0	0	0	0	0	0	0	0	0	0	0	0	
Unfractionated Stream	0	0	0	0	442	0	0	0	1,126	526	362	0	0	0	0	0	0	0	0	0	0	0	0	
Plant Condensate	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Liquefied Petroleum Gases	0	0	0	335	1,803	35	0	1,001	7,101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Unfinished Oils	10	74	0	0	0	0	0	1,153	0	79	1,000	0	0	0	0	0	0	0	0	0	0	0	0	
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Finished Motor Gasoline	6,056	0	0	1,449	2,033	1,137	0	47,919	10,263	561	0	867	0	0	0	0	0	0	0	0	0	0	0	
Finished Leaded Motor Gasoline	3,359	0	0	626	1,163	678	0	21,225	5,679	368	0	564	0	0	0	0	0	0	0	0	0	0	0	
Finished Unleaded Motor Gasoline	2,697	0	0	823	870	459	0	26,694	4,584	193	0	303	0	0	0	0	0	0	0	0	0	0	0	
Finished Aviation Gasoline	18	0	0	0	22	27	0	156	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naphtha-Type Jet Fuel	99	0	0	0	129	0	0	501	104	87	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kerosene-Type Jet Fuel	145	0	0	134	123	520	0	7,876	1,635	0	0	133	0	0	0	0	0	0	0	0	0	0	0	
Kerosene	14	0	0	0	0	0	0	262	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Distillate Fuel Oil	1,962	0	0	152	687	249	0	15,404	4,105	318	0	177	0	0	0	0	0	0	0	0	0	0	0	
Residual Fuel Oil	0	100	0	0	0	0	295	2,361	349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naphtha and Other Oils for Petro.																								
Feedstock	13	0	0	9	0	0	0	35	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Special Naphthas	0	0	0	16	0	0	0	275	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lubricants	9	78	0	36	21	301	0	411	301	0	0	0	0	0	0	0	0	0	0	0	70	0	0	
Waxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Asphalt and Road Oil	0	0	0	143	0	0	0	172	745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Miscellaneous Products	54	37	0	125	131	0	0	174	49	0	0	0	0	0	0	0	0	0	0	0	40	0	0	
Total All Products	8,380	289	0	2,399	5,520	1,968	295	78,202	29,477	1,497	362	1,177	0	2,115	1,497	362	1,177	3,672	0	16,575	0	0	0	

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, June 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	I	I	III	IV	I	II	IV	V	II	III	V	III	IV
Natural Gasoline and Isopentane	0	0	0	0	129	0	0	0	0	0	0	5	0	0	0
Unfractionated Stream	0	0	0	0	442	0	0	0	0	0	0	526	362	0	0
Plant Condensate	0	0	0	0	0	0	0	1,126	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	335	1,803	35	847	0	7,101	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	1,000	0	0	0	0	0	0	0
Finished Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,425	0	1,207	2,033	1,137	37,396	9,223	0	898	0	867	0	0	0	0
Finished Leaded Motor Gasoline	2,426	0	523	1,163	678	16,830	5,138	0	479	0	368	0	564	0	0
Finished Unleaded Motor Gasoline	1,999	0	684	870	459	20,566	4,085	0	419	0	193	0	303	0	0
Finished Aviation Gasoline	18	0	0	0	0	27	43	157	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	129	0	304	104	0	216	87	0	0	0	0
Kerosene-Type Jet Fuel	72	0	126	123	520	5,036	1,429	0	137	0	0	0	133	0	0
Kerosene	14	0	0	0	0	0	262	26	0	0	0	0	0	0	0
Distillate Fuel Oil	1,496	0	107	687	249	12,825	3,520	0	356	0	318	0	177	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	125	0	0	0	0	0	0	0	0	0	0	0	0
Total	6,025	0	1,900	5,346	1,968	56,713	24,295	0	1,607	1,497	362	1,177	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, June 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to					From V to			
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Crude Oil	0	0	0	0	0	0	0	423	0	423	0	1,658	0	3,672	0
Petroleum Products	2,355	289	0	499	174	295	21,066	1,177	3,919	15,970	3,524	508	0	0	110
Liquefied Petroleum Gases	0	0	0	0	0	0	154	0	0	154	0	0	0	0	0
Unfinished Oils	10	74	0	0	0	0	1,153	0	1,153	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	79	0	0	79	0	0	0	0	0
Finished Motor Gasoline	1,631	0	0	242	0	0	10,523	532	494	9,497	1,040	220	0	0	0
Finished Aviation Gasoline	0	0	0	0	22	0	113	5	27	81	25	0	0	0	0
Naphtha-Type Jet Fuel	99	0	0	0	0	0	197	8	73	116	0	0	0	0	0
Kerosene-Type Jet Fuel	73	0	0	8	0	0	2,840	74	523	2,243	206	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	466	0	0	45	0	0	2,579	319	234	2,026	585	0	0	0	0
Residual Fuel Oil	0	100	0	0	0	295	2,361	193	828	1,340	349	258	0	0	0
Naphtha and Other Oils for Petro. Feed. Use	13	0	0	9	0	0	35	0	0	35	33	0	0	0	0
Special Naphthas	0	0	0	16	0	0	275	33	163	79	191	0	0	0	0
Lubricants	9	78	0	36	21	0	411	0	335	76	301	30	0	0	70
Waxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	143	0	0	172	0	11	161	745	0	0	0	0
Miscellaneous Products	54	37	0	0	131	0	174	13	78	83	49	0	0	0	40
Total	2,355	289	0	499	174	295	21,489	1,177	4,342	15,970	5,182	508	3,672	0	16,575

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, June 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II			PAD District III			PAD District IV			PAD District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	4,095	0	4,095	1,658	0	1,658	16,465	2,081	14,384	0	0	0	0	20,137	-20,137
Petroleum Products	80,178	8,669	71,509	37,696	10,182	27,514	6,281	107,713	-101,432	1,968	3,036	-1,068	3,587	110	3,477
Natural Gasoline	0	0	0	612	129	483	129	607	-478	0	5	-5	0	0	0
Unfractionated Stream	0	0	0	1,652	442	1,210	804	1,126	-322	0	888	-888	0	0	0
Plant Condensate	0	0	0	2	0	2	0	2	-2	0	0	0	0	0	0
Liquefied Petroleum Gases	1,336	0	1,336	7,101	2,173	4,928	1,803	8,102	-6,299	35	0	35	0	0	0
Unfinished Oils	1,153	84	1,069	10	0	10	74	1,153	-1,079	0	0	0	0	0	0
Motor Gasoline Blending Components	79	0	79	1,000	0	1,000	0	1,079	-1,079	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	49,368	6,056	43,312	16,880	4,619	12,261	2,033	59,300	-57,267	1,137	1,428	-291	1,985	0	1,985
Finished Leaded Motor Gasoline	21,851	3,359	18,492	9,406	2,457	6,949	1,163	27,508	-26,345	678	932	-254	1,168	0	1,168
Finished Unleaded Motor Gasoline	27,517	2,697	24,820	7,474	2,152	5,322	870	31,792	-30,922	459	496	-37	817	0	817
Finished Aviation Gasoline	156	18	138	200	49	151	22	338	-316	27	0	27	0	0	0
Naphtha-Type Jet Fuel	501	99	402	290	129	161	129	821	-692	0	87	-87	216	0	216
Kerosene-Type Jet Fuel	8,010	145	7,865	1,780	777	1,003	123	9,648	-9,525	520	133	387	270	0	270
Kerosene	262	14	248	40	0	40	0	288	-288	0	0	0	0	0	0
Distillate Fuel Oil	15,556	1,962	13,594	6,385	1,088	5,297	687	19,865	-19,178	249	495	-246	533	0	533
Residual Fuel Oil	2,361	100	2,261	349	295	54	100	2,968	-2,868	0	0	0	553	0	553
Naphtha and Other Oils for Petro.															
Feedstock Use	44	13	31	46	9	37	0	68	-68	0	0	0	0	0	0
Special Naphthas	291	0	291	191	16	175	0	466	-466	0	0	0	0	0	0
Lubricants	447	87	360	310	57	253	169	742	-573	0	0	0	30	70	-40
Waxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	315	0	315	745	143	602	0	917	-917	0	0	0	0	0	0
Miscellaneous Products	299	91	208	103	256	-153	208	223	-15	0	0	0	0	40	-40
Total All Products	84,273	8,669	75,604	39,354	10,182	29,172	22,746	109,794	-87,048	1,968	3,036	-1,068	3,587	20,247	-16,660

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, June 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico	Total	Dist. IV Rocky Mt.	PAD Dist. V West Coast	United States
Residual Fuel Oil	2,478	160	2,638	95	1,218	191	371	1,875	580	6,120	3,674	412	61	10,847	246	9,341	24,947
0.00 to 0.30% Sulfur	577	33	610	0	67	0	117	184	23	456	488	92	10	1,069	24	950	2,837
0.31 to 1.00% Sulfur	1,759	1	1,760	7	344	0	140	491	486	434	1,308	191	0	2,419	92	2,510	7,272
Greater Than 1.00% Sulfur	142	126	268	88	807	191	114	1,200	71	5,230	1,878	129	51	7,359	130	5,881	14,838

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, June 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico	Total		
Residual Fuel Oil -- 0.00 to 0.30% Sulfur																
Refinery	379	41	420	0	107	0	45	152	27	271	266	10	19	593	123	612
Bulk Terminal	—	—	4,472	—	—	—	—	33	—	—	—	—	—	0	0	0
Total	—	—	4,892	—	—	—	—	185	—	—	—	—	—	593	123	612
Residual Fuel Oil -- 0.31 to 1.00% Sulfur																
Refinery	2,160	4	2,164	61	620	0	43	724	114	1,305	739	71	0	2,229	81	1,836
Bulk Terminal	—	—	6,595	—	—	—	—	594	—	—	—	—	—	2,761	0	520
Total	—	—	8,759	—	—	—	—	1,318	—	—	—	—	—	4,990	81	2,356
Residual Fuel Oil -- Greater than 1.00% Sulfur																
Refinery	1,265	91	1,356	3	1,122	143	59	1,327	62	3,062	1,728	86	49	4,987	233	4,239
Bulk Terminal	—	—	8,961	—	—	—	—	911	—	—	—	—	—	2,550	0	1,185
Total	—	—	10,317	—	—	—	—	2,238	—	—	—	—	—	7,537	233	5,424
																12,142
																13,607
																25,749

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, June 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to					From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low All	II	I	II	III
Residual Fuel Oil	0	100	0	0	0	295	2,361	193	828	1,340	349	258	0	0
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	136	0	0	0
0.31 to 1.00% Sulfur	0	0	0	0	0	0	569	0	322	247	167	0	0	0
Greater Than 1.00% Sulfur	0	100	0	0	0	295	1,792	193	506	1,093	46	258	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, June 1983
(Thousands of Barrels)

Country	Residual Fuel Oil			Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	
Arab OPEC				
Algeria	1,571	0	0	1,571
Kuwait	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	528	528
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	1,571	0	528	2,100
Other OPEC				
Ecuador	190	0	120	310
Gabon	0	0	0	0
Indonesia	1,255	12	0	1,267
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	434	491	2,591	3,516
Subtotal Other OPEC	1,879	503	2,711	5,093
Other				
Angola	0	316	0	316
Australia	0	0	0	0
Bahamas	675	255	0	930
Bolivia	0	0	0	0
Brazil	343	0	0	343
Brunei	0	0	0	0
Canada	470	279	161	910
Egypt	0	0	0	0
France	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	4	0	4
Mexico	0	0	321	321
Netherlands	0	0	0	0
Netherlands Antilles	220	352	2,936	3,508
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	642	0	0	642
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Syria	0	0	0	0
Trinidad	0	0	821	821
United Kingdom	0	229	132	361
Virgin Islands	550	1,334	474	2,358
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Other Western Hemisphere	525	661	223	1,410
Other Eastern Hemisphere	540	604	11	1,155
Subtotal Other	3,965	4,034	5,079	13,078
Total Imports	7,416	4,536	8,318	20,270

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, June 1983
(Thousands of Barrels)

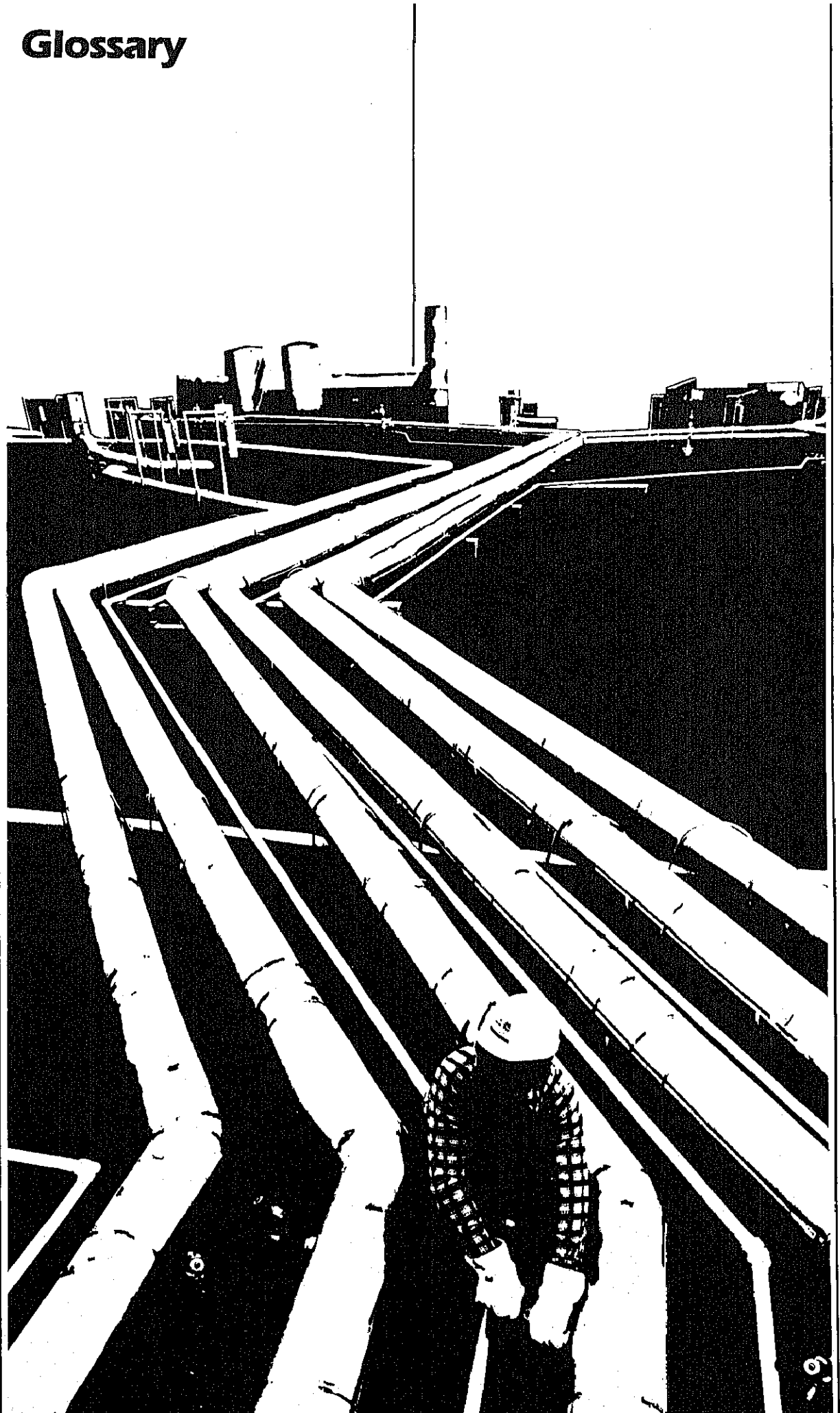
State	Residual Fuel Oil				Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%		
PAD District I	5,550	3,739	7,416		16,706
Connecticut	0	0	0		0
Florida	0	805	983		1,788
Georgia	0	0	0		0
Maine	0	0	733		733
Maryland	0	229	0		229
Massachusetts	0	0	1,903		1,903
New Jersey	964	345	866		2,175
New York	4,399	1,374	1,461		7,233
North Carolina	0	0	419		419
Pennsylvania	187	987	0		1,174
Rhode Island	0	0	0		0
South Carolina	0	0	99		99
Vermont	0	0	0		0
Virginia	0	0	951		951
PAD District II	470	0	111		581
Illinois	142	0	0		142
Michigan	243	0	0		243
Minnesota	3	0	2		5
North Dakota	(s)	0	27		27
Ohio	82	0	82		164
PAD District III	986	378	771		2,135
Louisiana	1	0	0		1
Texas	985	378	771		2,134
PAD District IV	0	0	9		9
Montana	0	0	9		9
PAD District V	409	420	11		840
Arizona	0	0	0		0
California	0	0	0		0
Hawaii	(s)	420	11		431
Washington	409	0	0		409
All PAD Districts	7,416	4,536	8,318		20,270

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Glossary



Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}-(\text{CH})_n-\text{OH}$. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhodium).

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (Including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Coking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C₂H₆) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C₂H₄) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, specialty oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C₅H₁₂, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green coke* may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C₃H₈, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C₃H₆, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in

six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary

distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum.
Viscosity at 210 degrees F. In Saybolt Universal Sec-

onds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erle, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

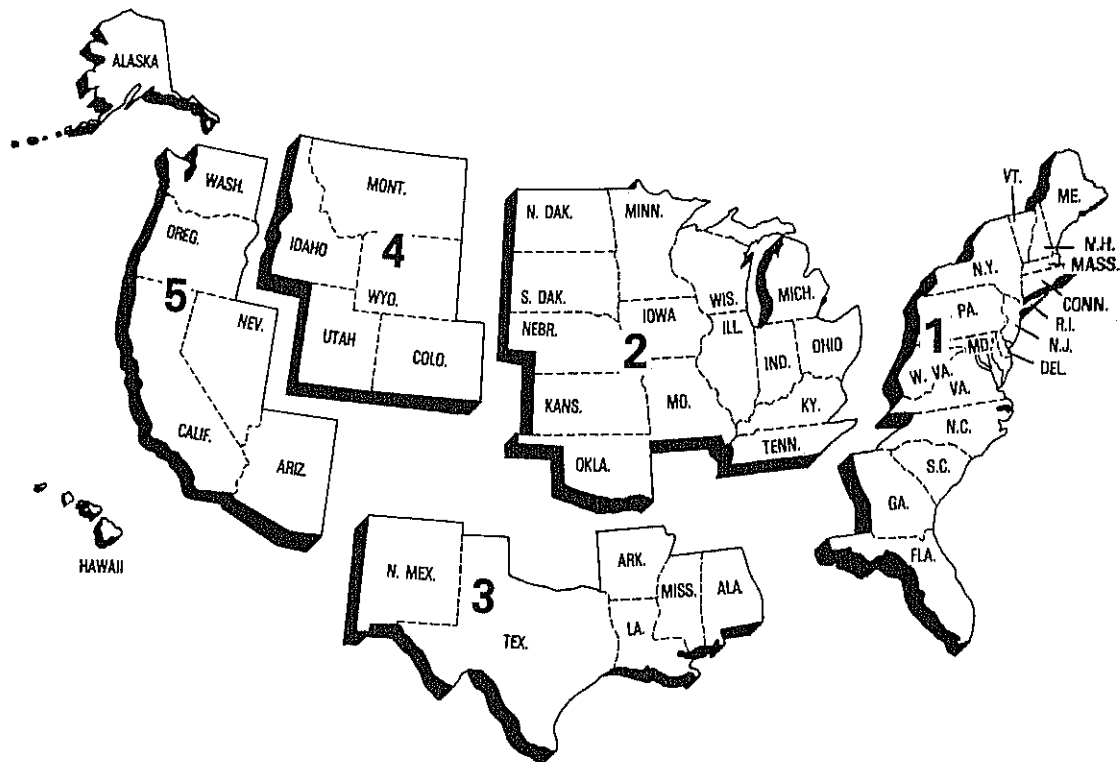
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

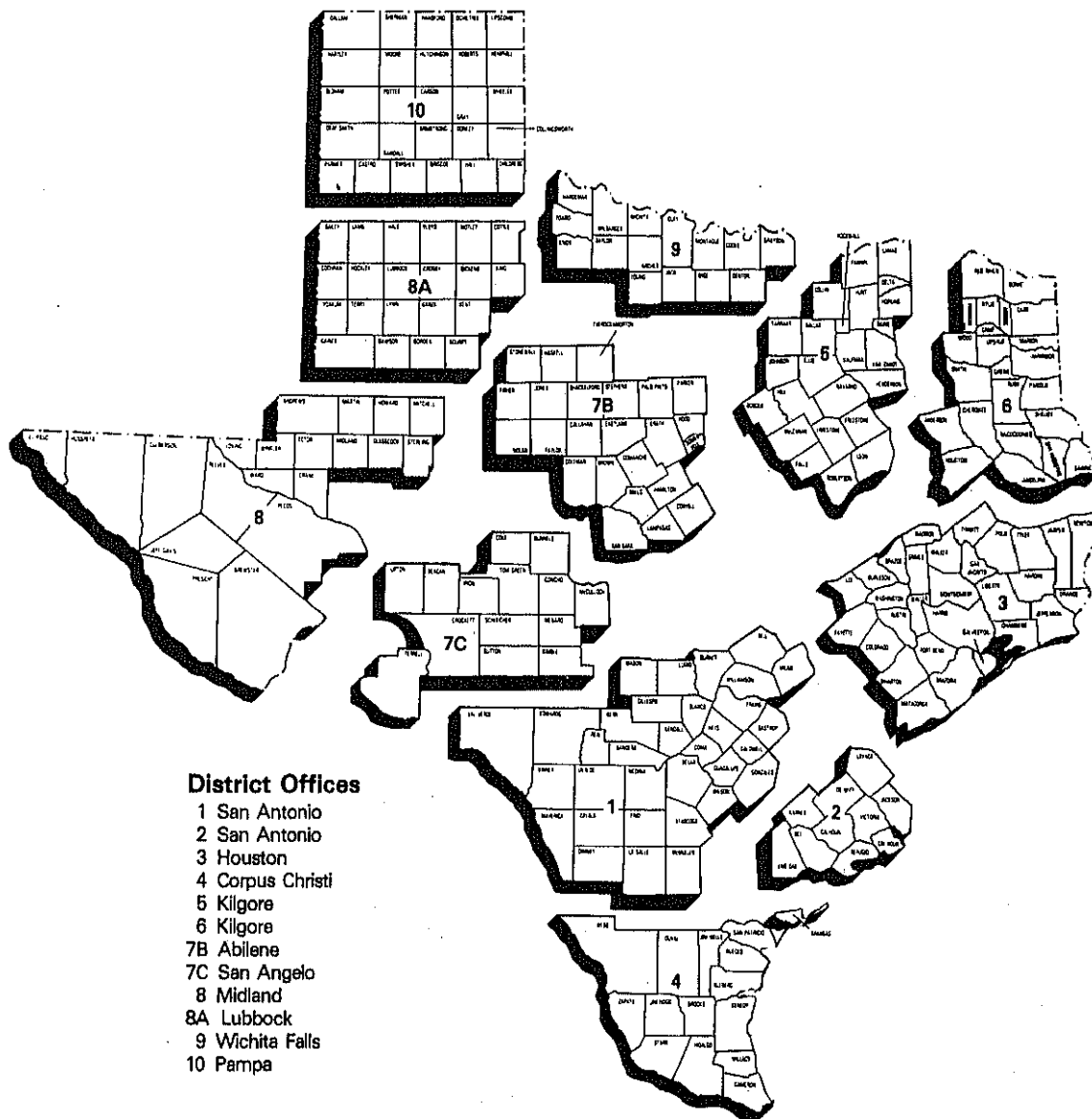
Petroleum Administration for Defense (PAD) Districts



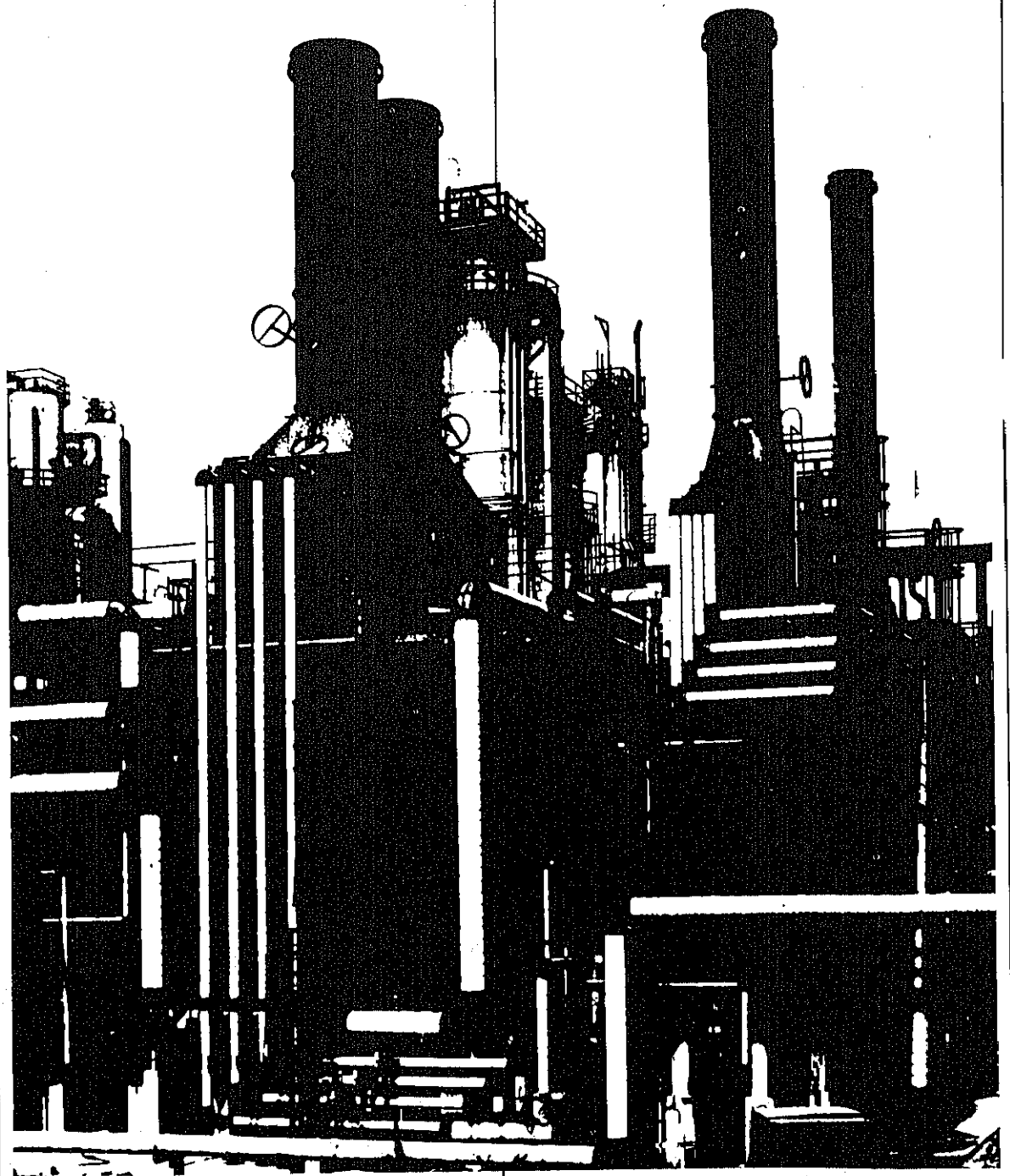
Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas



Explanatory Notes



Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the PSM.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the PSM.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery Inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average minus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 4.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): *Natural gas plant liquids (NGPL) Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the Im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

- Lines (31) through (35) equal the respective products supplied in Table 2.

- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F. for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

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REFLECTIONS

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